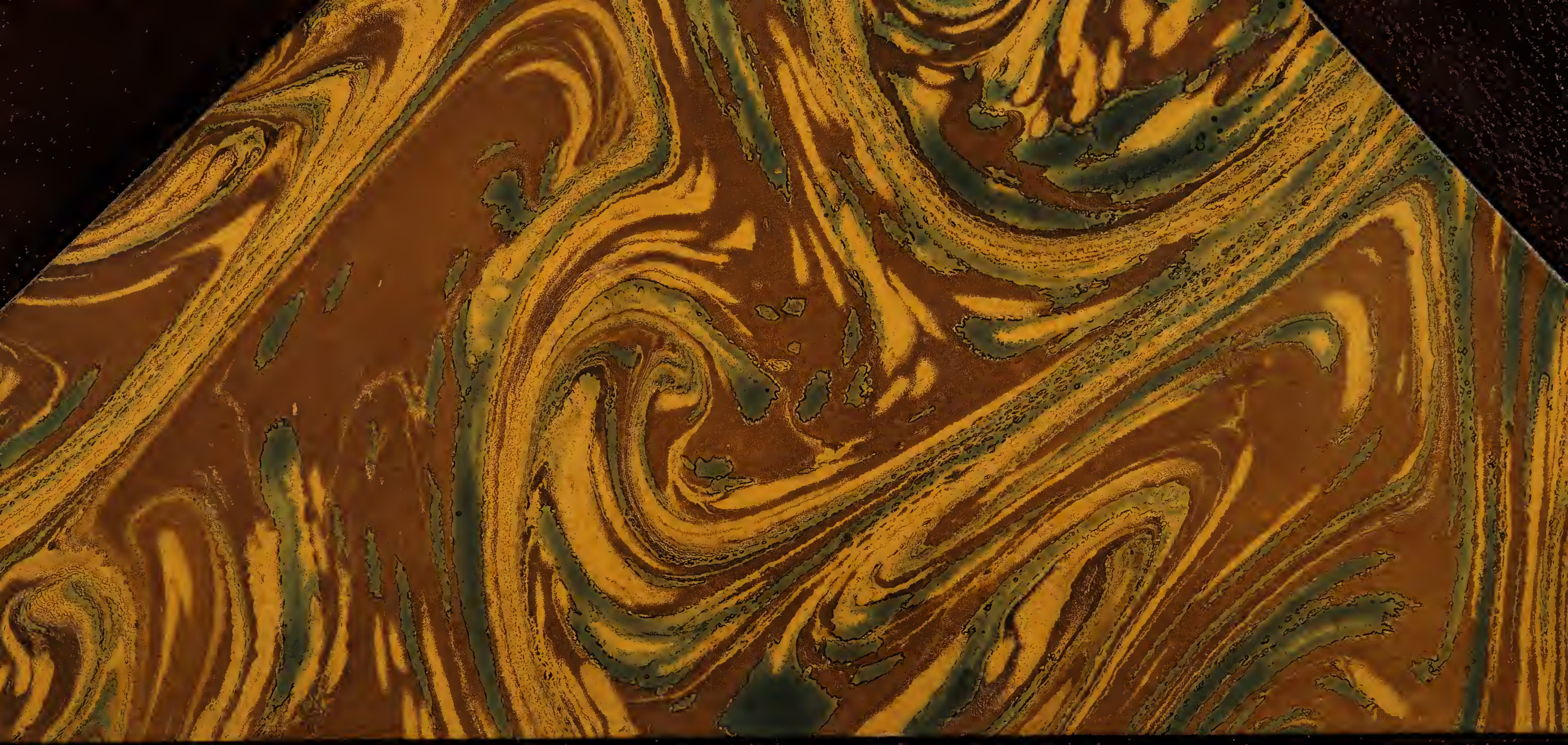


BX-246

C. FOX, LONDON, W.1.

Digitized by the Internet Archive
in 2019 with funding from
Wellcome Library

https://archive.org/details/s5id13404860

43239

THE

# LONDON MEDICAL REVIEW

AND

# MAGAZINE;

BY A

*SOCIETY OF PHYSICIANS AND SURGEONS.*

VOLUME THE FOURTH:

*INCLUDING FOUR MONTHLY NUMBERS,*

FROM JULY TO OCTOBER 1800.

Solus veritatis amor, et communis utilitatis studium, ad has partes suscipiendas impulerunt. BAGLIVI Oper. in Præf.

**London:**

*PRINTED FOR THE SOCIETY,*

BY S. GOSNELL, LITTLE QUEEN STREET, HOLBORN.

Published by H. D. SYMONDS, Pater-noster Row; VERNOR and HOOD, Poultry; CUTHELL, Middle Row, Holborn; MURRAY and HIGHLEY, Fleet Street; CALLOW, Crown Court, Soho; COX, St. Thomas's Street, Southwark; and GEISWEILER, Parliament Street.

MDCCC.

WELLCOME
HISTORICAL
MEDICAL
LIBRARY

# PREFACE

TO THE

## *FOURTH VOLUME.*

FROM the commencement of this Review, the Editors have laboured with the greatest diligence to obtain for their readers the earliest intelligence that can be collected of the state of medicine and surgery, and the discoveries making in those sciences, on the Continent. For though the information obtained from thence is often matter of curiosity rather than utility, this country, in most of the branches of medicine, having advanced considerably before them, yet we not unfrequently meet with observations well worthy attention. It gives us great pleasure, therefore, to be able to announce that the obstacles which for a long time prevented our attaining this object are removed: and as we are now promised a regular supply of the most celebrated foreign journals, we think we may safely rely that our Numbers will hereafter be constantly enriched with accounts of the works published in France, Germany, and various other parts of Europe. These we shall abridge or give entire, according as the subjects appear to be interesting from their novelty or intrinsic value. In the mean while, from the very widely extended sale of our Journal, through this country as well as on the Continent, our articles of literary intelligence will, we trust, be more numerous and valuable. With these advantages, and with a steady determination to execute the most difficult part of our undertaking (the analysis of British publications) with care and fidelity, we have no doubt of experiencing a continuance of public patronage.

The pre-eminent utility of vaccine inoculation will be found, from numerous valuable communications on the subject contained in this volume, to be established on such a basis as seems to defy even scepticism itself any longer to disbelieve its solidity. Mr. Barlow's ingenious idea of procuring premature labour, in certain situations and circumstances, although not new, having been noticed and practised by some of the accoucheurs in London, will now be more generally known, and may be the means of preserving life in many cases when it could by no other way be saved. Mr. Webster's History of epidemic and pestilential Diseases opens a new field for observation and inquiry, that may prove of infinite importance to science; particularly it may lead to a more distinct knowledge of the causes vitiating the atmosphere. Mr. John Bell's Memorial on the present State of military and naval Surgery, and Dr. Gregory's Address to the Managers of the Royal Infirmary, are valuable documents, that cannot fail of having influence in improving the important institutions to which they are addressed. Also Mr. Blair's observations on the use of caustic substances, and on metallic bougies, in strictures of the urethra, as they are founded on actual experience, must have weight in settling the fluctuating opinions of practitioners on these interesting subjects. Mr. Salzmann's Gymnastics for Youth presents us with much curious matter: and Dr. Saunders's Treatise on mineral Waters, with which we shall conclude our enumeration of the prominent articles in this volume, will, we have no doubt, be received with pleasure; as containing more genuine and useful observations on that subject than had been before collected in one work. We have only to request our numerous friends will continue furnishing us with their ingenious communications, and to assure the public we will not relax in our endeavours to fill our Miscellany with articles that shall contribute to their amusement and instruction.

CONTENTS

# CONTENTS

OF THE

# *FOURTH VOLUME.*

## ANALYSIS OF BOOKS.


| | Page |
|---|---|
| DR. *Bouttatz* ueber den Phosphor als Arzneymittel — | 1 |
| Mr. *Webster* on epidemic and pestilential Diseases — | 5, 117 |
| Dr. *Swediaur* sur les Maladies syphilitiques — — | 19 |
| Dr. *Nisbet*'s Clinical Guide, Part III. — — | 23 |
| Dr. *Dufresnoy* sur l'Usage du Rhus-radicans, &c. — | 33 |
| *Von Crell*'s Chemische Annalen, &c. für 1800 — | 38 |
| Dr. *Garnett* on the Preservation of Health — — | 39 |
| Dr. *Cappel* de Pneumonia Typhode sive Nervosa — | 43 |
| Memoires de l'Institut National des Sciences, Tomes I. & II. | 45, 150 |
| Mr. *Fermor*'s Reflections on the Cow-pox — — | 57 |
| Mr. *H. Jenner*'s Address to the Public on the Vaccine Inoculation — — — — | 59 |
| Mr. *Dunning* on the inoculated Cow-pox — — | 64 |
| Dr. *Woodville*'s Observations on the Cow-pox — | 69 |
| Dr. *Lourdes* sur la Vie de Spallanzani — — — | 73 |
| M. *Lair*, Essai sur les Combustions humaines — | 113 |
| Mr. *Renwick* on the medical Department of naval Service | 115 |
| M. *Chaptal* sur le Perfectionnement des Arts chymiques | 116 |
| M. *Cavanilles*, Icones et Descriptiones Plantarum — | 136 |
| Dr. *Hull* on Mr. Simmons's Detection, and the Cæsarean Operation, &c. — — — — | 141 |

Page

Mr. *J. Bell*'s Memorial on the State of military and naval Surgery — — — — — 160
Dr. *Swediaur*'s Materia Medica — — — 165
Dr. *Burserius*'s Institutions of the Practice of Medicine, Vol. I. 168
Dr. *Fahner*'s Beyträge zur practischen und geritchtlichen Heilkunde — — — — 180
Dr. *Gregory*'s Memorial to the Managers of the Royal Infirmary 184
M. *Sabatier*'s Traité complet d'Anatomie — — 188
Dr. *Baillie*'s Fourth Fasciculus of Engravings — 189
Dr. *Pierer*'s Medicinische National Zeitung für Deutschland, &c. 190
Philosophical Transactions of the Royal Society for 1800, Part I. — — — — 226, 330
*Philibert*, Introduction à l'Etude de la Botanique — 238
The Edinburgh Practice of Physic and Surgery — 239
Mr. *Nayler* on the Treatment of Ulcers — — 252
M. *Foderé*, Traité du Goître et du Crétinisme — 265
Mr. *Lucas* on the Education, Qualifications, and Offices of a Surgeon-apothecary — — — 267
Dr. *Moreau* d'un Cours d'Hygiène ou de Médecine — 272
Mr. *Salzmann*'s Gymnastics for Youth — — 274
Mr. *Lane*'s Principles of English Farriery vindicated — 288
Dr. *Baeta* de Febribus intermittentibus medendis — 289
Dr. *Saunders*' History and medical Power of some mineral Waters — — — — 291, 350
Cit. *Brewer* et *Delaroche*, Bibliothéque Germanique medico-chirurgicale — — — 300
Tableau de l'Ecole de Botanique à Paris — — 329
Dr. *Fowle*'s Treatise on the Fevers of the West Indies — 343
Dr. *Méhée*, Traité des Plaies d'Armes à Feu — — 349
M. *Bouvyer-Desmortiers* sur les Sourds-muet de Naissance 370
Dr. *Nisbet* on Scrofula, Consumption, and Cancer — 371
Dr. *Alibert* sur les Fièvres pernicieuses et ataxiques intermittentes 382
Dr. *Gren*'s Principles of modern Chemistry, systematically arranged — — — — 390
Dr. *Formey*'s Medicinische Ephemerides von Berlin — 393
Mr. *C. Bell*'s Appendix to a System of Dissections — 397
Dr. *Loder*'s Journal für die Chirurgie, &c. — — 397

MEDICAL

## MEDICAL CORRESPONDENCE.

Page

Dr. *Thilow*'s Description and Engraving of an Instrument for dislodging gaseous Fluids from the human Body 74
Dr. *Buchan*'s Account of a Tobacco-pipe in the Œsophagus 77
Observations on a supposed new Method of curing the Plague 79
Dr. *White* on the anti-nephritic Qualities of the Peach-leaf 81
Mr. *Woollett*'s Case of uterine Hæmorrhage — — 83
Mr. *Kerrison* on the Cure of Jaundice by Mercury — 85
A Testimonial in favour of the Cow-pox, signed by thirty-six medical Practitioners in London — — 90
Mr. *Ring*'s additional Observations on the Cow-pox — 91
Mr. *Simmons* on the infectious Nature of Erysipelas — 96
————'s Note relative to the Cæsarean Operation 98
Mr. *Leighton*'s Remarks on the Mode of exciting premature Labour — — — — 101
Prize Questions proposed by the National Institute of France 103
Notices of the Decease of eminent medical Men — 104
Mr. *Malim*'s Case of Small-pox after the vaccine Inoculation 105, 208
Mr. *Merriman*'s Remarks on the Mode of exciting premature Labour — — — — 192
Mr. *Rowland*'s Cases of dislocated Thumb, and of Ranula, &c. 198
Hr. *Harrup* on the anodyne Effects of Camphor, &c. — 200
Letter to Dr. *G. Pearson* on the Vaccine Inoculation at Paris 204
Mr. *Blair*'s Reflections on caustic and metallic Bougies 209, 321
Account of the various medical and chirurgical Lectures in London — — — — 212
Prof. *Osiander*'s Case and Engraving of a remarkable diseased Testicle — — — — 301, 418
Mr. *Ring*'s further Remarks on variolated vaccine Matter, and on Mr. Malim's Case — — — 307
Mr. *Reece*'s Notice of a new Pharmacopœia for Hospitals, &c. 311
Dr. *Nelson Scott*'s Cure of Croup by the Use of Polygala Seneca 312
Dr. *Nisbet*'s Cure of a Cancer in both Breasts — 315
Mr. *Blair* on the Operation of trepanning the Sternum 319
Account of several Societies in London for the Advancement of medical Knowledge — — — 325

Prof.

Page

Prof. *Abilgaard* and *Pfaff* on Respiration — — 404
Dr. *Guthrie* on the Effects of common Sand — — 405
Dr. *Jordens'* extraordinary Case of Madness — — 406
Dr. *Herder* on the phosphoric Acid in Petechiæ — 407
Dr. *Hildebrandt* on vitriolic Acid in nervous Diseases — 410
Dr. *Dürr* on sweating of the Feet — — 412
Drs. *Handel* and *Hufeland* on the Use of Phosphorus — 413
Mr. *Hirsch*'s new Remedy in Toothach — — 417
Of the Medical Lectures and Society in Edinburgh — 420
Monthly Catalogue of new and intended Publications 108, 219, 421
*The Editors'* Answers to Readers and Correspondents
110, 224, 328, 424

*** Communications for the Editors of this Work will in future be received by Mr. BLAIR, *N°* 69 *Great Russel Street, Bloomsbury.*

Fig. 5

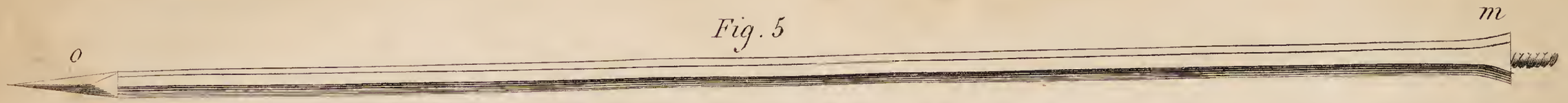



Fig. 6

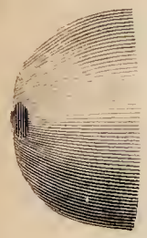



Fig. 4

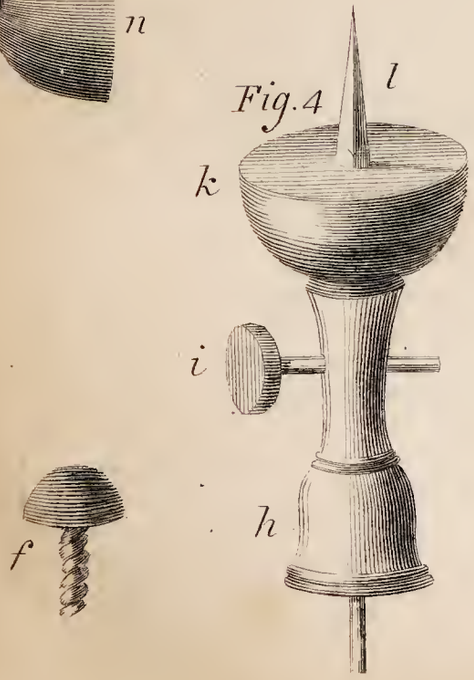



Fig. 2

Fig. 3

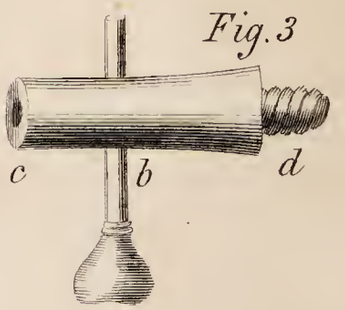
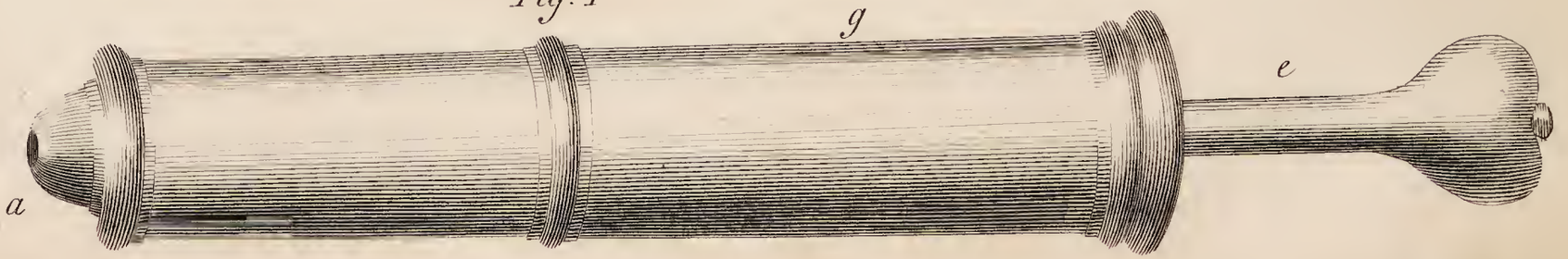



Fig. 1




T.W del.

J.Walker sc.

THE

# LONDON MEDICAL REVIEW

AND

# MAGAZINE.

VOL. IV. N° XVII. JULY MDCCC.

## ANALYSIS OF BOOKS.

ART. I. *Ueber den Phosphor als Arzneymittel.* Von FRANZ BOUTTATZ, der Chirurgie und Arzneiwissenchaft Doctor. *i. e. On Phosphorus as a Medicine.* By Dr. BOUTTATZ. Octavo. 116 pages. Göttingen. 1800.

THE medicinal uses of phosphorus is a subject to which English practitioners have hitherto paid but little attention; although it cannot be doubted that so potent an article is very likely, in judicious hands, to become subservient to the healing art. We are happy, however, to find that since the publication of two papers on this subject in our Numbers for March and April 1799, an inquiry into the virtues of phosphorus has been instituted by the Medical Society of London. (See the Prize Questions of that Society for 1799, 1800, and 1801, detailed in our Third Number, page 308.) We are not entirely unacquainted with the experiments which have been lately

made by several practitioners in this metropolis, and hope in the issue to find that something beneficial will result to the public.

The work before us contains an inquiry into the medical properties of phosphorus, by an intelligent physician from Moscow; who, we understand, has been recently visiting some of the principal universities on the Continent, and is at present in London. This tract is divided into five chapters; in the first of which the author gives a concise history of the introduction and preparation of phosphorus.

The second chapter treats on the history of the medical use of phosphorus. It was to be expected that a substance so remarkable as phosphorus would soon excite the attention of the physicians; and the history of the healing art sufficiently proves that this was actually the case. The observations made by different eminent physicians relative to this subject were dispersed in pamphlets, dissertations, and miscellaneous publications; and by our author are chronologically collected, with the addition of the opinion of each respective writer.

Chap. III. contains the results of the foregoing section, and a direction how to dissolve phosphorus in the easiest and most advantageous manner. The author says, "In these experiments and observations on the medical use of phosphorus, quoted here, there appears, indeed, a considerable catalogue of diseases in which this remedy bas been applied, or at least recommended, by physicians. Malignant fevers of all descriptions, consumptions, the rheumatism, gout, convulsions, epileptic fits, the tetanus, lethargy, dropsy, the caries of the bones, &c. are stated to have been cured with the assistance of phosphorus. It is recommended as a resolvent, exciting, and diuretic medicine, as a lithontriptic and aphrodisiac."

The implicit confidence reposed in the credibility and spirit of observation in physicians, is, indeed, declining in the same proportion in which the mass of pretended observations increases; it is, however, worth while to try how far the various, nay even contradictory, opinions of different physicians may be

con-

concentered in one general focus: the author, therefore, is entitled to our thanks for having furnished us, in his treatise, with a small contribution towards effecting this purpose. Speaking of the quantity in which phosphorus may be safely administered, he shews how it happened that the physicians of the old school could venture to prescribe ten grains of phosphorus in one dose.

Chap. IV. treats of the author's experiments upon poultry and quadrupeds, made with a view to ascertain and determine the effects of phosphorus. The results of these experiments differed according to the greater or smaller doses in which it was given. The author, after having made a great variety of experiments, resolved to try the effects of phosphorus on his own person. He took from one grain to one and a half, within twenty-four hours, gradually increasing the dose, but never could exceed that quantity. He perceived an uncommon degree of exaltation in his animal spirits, and an astonishing increase of his muscular strength. These effects were succeeded by a keen appetite, a pleasant sensation, and a perception of uncommon agility animating his whole frame, and attended with a copious discharge of urine. The author repeated this experiment several times with the same effect, but never could exceed the quantity of a grain and a half, without being seized with a nausea or vomiting. Besides, to these symptoms, he felt a violent pain in the stomach, heat in the body, a quick and strong pulse, and a congestion towards the head, which compelled him to desist from any further experiments.

Chap. V. contains general remarks on the nature and medical use of phosphorus. The author says, "It appears by all the experiments and observations which I have stated, that phosphorus is one of the most efficacious remedies, and may justly be regarded as a most powerful medicine. If it be given in larger doses, it occasions convulsions, heats the body to an excessive degree, and produces an inflammation in the blood

and violent vomiting. If the body be too irritable, the most fatal accidents may be produced by its use. Hence it follows, that phosphorus can never be prescribed with benefit, except when there exists an unusual degree of insensibility; or when the vital power is extremely low; when a weak, small, and almost imperceptible pulse, cold limbs, and a state of torpor are indicated; especially in nervous diseases, which originate principally in an excessive degree of debility, in palsies, the tetanus, epilepsy, and similar cases, when the Peruvian bark, serpentaria virginiana, camphire, cantharides, musk, &c. &c. have been tried without effect. If it be compounded with other powerful medicines, it increases their strength to a considerable degree, and, as it were, unfolds their latent qualities. When rapidly exciting means are required, in order to exalt the vital powers, phosphorus is the principal, if not the only effectual remedy."

If we compare the observations of those physicians who have hitherto made experiments with phosphorus, we find that it has been administered in the most heterogeneous diseases, as for instance, in bilious and putrid diseases, in violent eruptions of the skin, in lethargy, palsies, in a state of deep decline, in the tetanus, nervous complaints, &c.; but those who thence would conclude that the phosphorus is a specific remedy against these diseases, would surely betray the most blameable empyricism. The philosophical physician is well aware that there exists no such universal remedy; but the number of philosophical physicians, unfortunately, is so small, that the greatest precaution is necessary in recommending a new remedy.

The author, therefore, judiciously observes, that phosphorus is by no means to be considered as a specific remedy against any particular disease, but may be successfully applied in most diseases attended with extreme debility, after all other means have been tried in vain to rouse the depressed vital powers.

The

The author was the first who discovered that the addition of camphire greatly tends to lessen the inflammability of phosphorus, and thereby qualifies it to be used externally as one of the best exciting means. It is already sold for that purpose in many German shops, under the denomination of Linimentum volatile phosphoratum.

We shall be able in a future number of our work to lay before our readers some account of the efficacy of the phosphoric acid, administered internally by Dr. W. G. HERDER of Weimar. *Vide* Journal der Practischen Heilkunde, herausgegeben von C. W. HUFELAND, Neunter Band, Drittes Stück, page 148.

---

ART. II. *A brief History of epidemic and pestilential Diseases, with the principal Phenomena of the physical World, which precede and accompany them, and Observations deduced from the Facts stated.* By NOAH WEBSTER, Author of Dissertations on the English Language, and several other Works; Member of the Connecticut Academy of Arts and Sciences; of the Society for the Promotion of Agriculture, Arts, and Manufactures, in the State of New York; of the American Academy of Arts and Sciences; and Corresponding Member of the Historical Society in Massachusetts. Vol. I. Octavo. Two volumes. 559 pages. ROBINSONS, London. 1800. Price 18*s*.

IN the course of the last year, a pamphlet appeared from the College of Physicians at Philadelphia, stating, that after the most minute inquiry they had ascertained that the yellow fever, which had raged in that and some of the neighbouring provinces, had taken its rise from persons infected with fever who fled from Domingo, or came from some of the neighbouring islands, where the disease was raging.

This declaration coming from a society of ingenious and enlightened

enlightened physicians, who had undertaken the investigation for the purpose of satisfying the inhabitants of the country, as well as to be enabled to direct the means by which so severe a visitation might in future be prevented, must not be lightly given up. At the same time it is to be observed, that Dr. Rush, one of the most enlightened of their members, had attributed it to causes arising among themselves. To collected sordes in their own district, suffered to accumulate, and become putrid; the noxious vapours from which, contaminating the air, produced the disease, first in the vicinity of the putrefying sordes, and afterwards, by infection, to the whole city.

His idea, however, seemed only to be founded on the disease having been first observed in a part of the town near which a quantity of damaged coffee was suffered to lie and decay. The author before us embraces neither of these opinions, but seems to think its origin may be traced, in common with all the destroying pestilences with which the world has been afflicted from the beginning of time, to the powerful influence of the planets, disturbing the qualities of the atmosphere.

But before we enter on the subject, it may be right to give the reasons assigned by the author for making this inquiry, and in his own words.

Finding the opinions of physicians, on the origin of the yellow fever, various and contradictory, "I resolved," he says, "to make an effort to obtain evidence which might decide the point in one way or the other; and as facts only can be relied on as a sure basis of principles and theory, I determined to make a collection of facts from all parts of the United States, where the yellow fever or other malignant fevers had prevailed during the preceding years. For this purpose, on the 31st of October 1795, I addressed a circular letter to the physicians of Philadelphia, New York, Baltimore, Norfolk, New Haven, and in general throughout the United States, requesting them to communicate to me whatever facts had

had come within their observation, which could throw light on the foreign or domestic origin of the yellow fever. In consequence of which I received a number of communications, which were published in 1796, and to which is prefixed my circular letter.

"These communications, though less numerous and satisfactory than were desirable, united with a multitude of facts within my own observation, convinced me of the fallacy of the vulgar opinion respecting the origin of the yellow fever in the United States from imported sources. I found repeatedly that the reports of persons taken ill in consequence of intercourse with vessels from the West Indies, or with diseased seamen, infected cotton or clothing, or the like causes, were mere idle tales, raised by the ignorant or interested, and wholly unsupported by evidence. Scarcely an instance could be found in which the evidence of the propagation of disease from imported infection was sufficient to render the fact even probable.

"On the other hand, the evidence of the origination of the disease in New York, Baltimore, Norfolk, Newbury Port, Boston, and Charlestown, appeared to be clear and satisfactory. In most of those places the fact has never been questioned.

"When the same disease appeared in Philadelphia in 1797 the question of importation or domestic origin again agitated the faculty and the public; the revival of the discussion, and particularly certain publications of Dr. William Currie, in the Philadelphia prints, called forth my exertions to unite opinions, and save the citizens of this country from the distraction of measures which must necessarily follow a division of opinions. I considered and still consider the question as resting principally on fact, and not on medical skill, therefore proper to be investigated and discussed by any man who has leisure and means, as well as by physicians." The author, we should here observe, was neither bred to, nor practised in, any branch of medicine.

" These considerations," he goes on to say, " gave rise to the observations which I addressed to Dr. Currie, through the medium of the public papers, in the months of October, November, and December, 1797. The design of these observations was originally limited to the purpose of proving the yellow fever of our country to be generated by local and domestic causes, by laying together the facts which I had collected from various parts of the United States, without any intention of examining the history and phenomena of pestilential diseases in other countries, and other periods of the world.

" In pursuing this object, however, I was led insensibly to examine all the books I could find on the subject of the plague, and the subject being new, I found too much pleasure in prosecuting it, readily to abandon the pursuit. Facts which were new to me were daily presenting themselves to my mind, and, after three months investigation, I was persuaded that those facts are of too much importance to philosophy, to medicine, and to human happiness, not to merit publication. Such is the origin of the present treatise."

The author considers the yellow fever as a true plague, varying only from that common in the Levant, in some circumstances, which difference of climate or constitution may be supposed to have produced.

" That pestilential disease," he says, " which usually in the Levant produces swellings in the glands, as buboes, I shall call the glandular or inguinal plague. The pestilential disease which has afflicted some of the cities in America, and is usually called the yellow fever, I shall denominate the bilious or American plague.

" In the Levant plague, swellings in the groin, in the arm-pits, and behind the ears, do not in every case appear; but they are the general distinguishing marks of the true pestis or plague.

" In the yellow fever the skin is not, in every case, marked

by

by a yellow colour, but it is generally the fact; and therefore this form of pestilence may very well take its denomination from that circumstance of its bilious appearance.

"Whether these are diseases specifically distinct, or only the same disease varied and modified by climate, season, or other circumstances, is a question that belongs to the faculty. It is sufficient for my purpose to observe, that in most of the symptoms they agree, that they are pestilential, and greatly to be dreaded by mankind. I shall therefore treat them as different forms of the same disease. There may be some cause for believing that the moisture of a country, abounding with woods and marshy grounds, may occasion the difference in the colour of bodies which fall victims to pestilence."

The author examines the opinions of physicians and philosophers on the nature and cause of pestilential fevers, from Hippocrates to the present time, and observes, that the influence attributed by the ancients to the aspects of the planets, and the vicissitudes of the seasons, has been transferred by the moderns "to invisible animalculæ, to infection concealed in bales of merchandise or old clothes, transported from Egypt, and let loose to scourge mankind and desolate the earth."

"In both periods of the world," he says, "the common mass of people, usually ignorant, and always inclined to believe in the marvellous, have cut the Gordian knot of difficulty, by ascribing pestilence to the immediate exercise of Divine Power; under the impression that the plague is one of the judgments which God in his wrath inflicts on mankind to punish them for their iniquities.

"Without deciding on the comparative merit of these respective opinions, it is sufficient to observe, that they are all probably incorrect; and those of the philosophers altogether inadequate to explain the origin of pestilential epidemics."

To supply their defects, the author gives an historical account of the most remarkable plagues that have been recorded, with the state of the atmosphere at the times they occurred;

" and as the most accurate observers," he says, " of the operations of nature, have suggested the probability that pestilential epidemics are caused by some occult qualities in the air, or by vapour from the internal parts of the earth, or by planetary influence, it is necessary to inquire how far such suggestions are supported by facts. For this purpose I shall note, as I proceed, any extraordinary occurrences or phenomena in the physical world, as earthquakes, eruptions of volcanoes, appearance of comets, violent tempests, unusual seasons, and other singular events and circumstances, which may appear to be connected with pestilence, either as cause or effect, or as the effect of a common cause."

The history, or brief historical account, as the author calls it, is continued to the end of the first volume, that is, through 550 pages. We shall only extract such passages as appear to us most curious and deserving general attention.

He begins with reciting some passages from the Mosaic history, whence we learn that Egypt, from the earliest periods of which we have any records, was considered as the great seminarium of the plague.

" In Deuteronomy xxviii. the Israelities are warned against disobedience to the laws of Moses, and in case of disregarding them, are threatened with the diseases of Egypt, the botch, the emerods, and the scab. These are still prevailing disorders in that country, under the names of leprosy, elephantiasis, plague, &c.

" In verse 60 of the same chapter, it is denounced, ' Moreover he shall bring upon thee all the diseases of Egypt, ' of which thou wast afraid.'

" Amos iv. 10. ' I have sent among you the pestilence, ' after the manner of Egypt.'

" These authorities of high antiquity leave no room for doubt or controversy on the question, whether Egypt originates the plague. The evidence is decisive against those modern superficial philosophers, who hold in contempt the most

authentic ancient history, because it has claims to inspiration. Yet infidels, if they were not too wise to read, examine, and be informed, might be convinced of the authenticity of the scripture history, by comparing the facts related with the present state of the world. The present endemial, and other diseases, which often occur in Egypt, answer so exactly to the description given of them in the books of Moses, as to leave no room to question the genuineness of those books. It was the peculiar climate of Egypt, and the usual prevalence of scorbutic and malignant complaints in that country, which occasioned all the minute injunctions of Moses, in regard to washing, cleansing, and purifications. The same, or similar regulations, were enjoined by the laws of Egypt.

"In the Bible also we find evidence of the prevalence of pestilential epidemics among cattle. A murrain is among the ten plagues mentioned in Exodus, and Ezekiel xiv. 21. says, 'If I send a pestilence into that land, to cut off from 'it man and beast.'

"We find the same fact in Homer, where also we observe pestilence ascribed to extreme heat, under the allegorical name of Apollo, or the supposed influence of the dog star.

> "On mules and dogs the infection first began,
> And last the vengeful arrows fix'd in man."

Again,

> "As vapours blown by Auster's sultry breath,
> Pregnant with plagues, and shedding seeds of death,
> Beneath the rage of burning Syrius rise."

And further on, he says,

> "Not half so dreadful rises to the sight,
> Through the thick gloom of some tempestuous night,
> Orion's dog (the year when autumn sways),
> And o'er the feebler stars exerts his rays:
> Terrific glory! for his burning breath
> Taints the red air with fevers, plagues, and death."

"The circumstances," the author says, "to be noted in the foregoing extracts are, first, that the pestilence among cattle preceded that among men. This is a common fact, but not always the case. Secondly, that heat and moisture, with a south wind, were productive of pestilential diseases. Thirdly, that such diseases raged in Greece during the autumnal season, and were ascribed to the influence of Syrius, or the dog star.

"It is remarkable," the author adds, "that in the pestilential period to which Homer alludes, which happened during the siege of Troy, Etna was in a state of eruption; or rather at the close of the period; for Eneas, when driven from Troy, sailed with his fellow-citizens to Sicily, but was frightened away by a violent explosion of Etna."

A small time prior to the breaking out of one of the first plagues that infested Rome, a comet is said to have appeared, followed by an eruption of Mount Etna.

The author assumes, as a general law of nature, "that the approach of comets to this earth calls into action the subterranean fires, and volcanoes discharge their contents," he says, "during, or within a few months of the appearance of comets. From the same cause, the air is decomposed, or so changed in its properties, as to become destructive of life. Tempests are also at those seasons more violent than at other times, the ocean swells without winds, the tides are much higher, and high tides are more numerous and frequent." Numerous coincidences of this kind are related, and the author is at great pains in settling the chronology of them, different writers sometimes placing the events a few years earlier or later. In those cases the existence of plague or earthquake is sometimes used by him to fix the time of the appearance of the comet. "The uniform influence," he says, "of comets in producing violent tempests and unusual swelling of the ocean, within a year of their appearance, and after their departure, may assist in correcting ancient chronology."

Thucydides

Thucydides relates, that, during the plague at Athens, "earthquakes affected the largest part of the globe, and shook it with the utmost violence. In many places there was severe drought and a subsequent famine. In some places the earthquakes produced alarming inundations of the sea, as in Eubœa and Atalanta. The Prytaneum, or town-house in Athens, the fortifications and some dwelling-houses were demolished. These events were in the fifth and sixth years of the Peloponnesian war, answering to 427 and 426 B. C. and consequently were at the close, or subsequent to the pestilence. About the same time there was a violent eruption of Etna, such as had not been known for fifty years preceding. This period was also marked by the approach of a comet; but I am not clear that it was in the year B. C. 431, as stated by Dr. Priestley in his Lectures on History. The drought was probably within a few months of the appearance of the comet, according to numerous observations in late periods of the world; by which it would seem to be a law of the physical system, that preceding, during, and following the approach of those erratic bodies, this earth is affected with great rains and snows, droughts, violent tempests, high tides, and earthquakes."

The following passages will shew the author's idea of the causes contributing to disseminate the plague, and extend its ravages over different countries; which he does not admit is done by persons or goods passing from places that are infected.

"The plague in Athens," he says, "broke out in the second year of the Peloponnesian war, when all the inhabitants of the Athenian territory were crowded into the city, to avoid the destructive ravages of the Lacedemonians. This circumstance alone would account for the production of pestilential diseases in the city; but it is probable, that had the same event happened in a period of general health, the sickness in Athens would have been limited to dysentery, the more violent camp fevers, or common typhus.

"But,

"But, unfortunately, this war broke out at a time of universal pestilence, when the diseases of the healthiest countries assume new and more malignant symptoms, and hence we account for the violence and duration of the malady. This idea seems to be important, and the only material one to be added to the excellent philosophical account of the plague at Athens, by Dr. Elihu H. Smith, late of New York.

"The origin of this pestilence is stated by the historian to have been in that part of Ethiopia which borders on Egypt; thence extending to Egypt, Lybia, the King's dominions, or Persia and Greece. Some of the more violent of modern plagues have first appeared in the same region; but we are not to conclude from this description, that the disease is propagated by infection from person to person. It appears first where the original or secondary causes, that is, general and local contagion, are the most powerful. If the state of the atmosphere over the world, at any one time, is equally vitiated by some unknown cause, its effects will first appear where that state of air is most powerfully aided by local vitiation, as in cities or marshy grounds. Of this we have numerous proofs. But, in modern times, whenever the general contagion, united with local causes, produces plague in Egypt or Constantinople, it produces some milder epidemic in the neighbouring countries, and often its effects are visible at the same time in most parts of the world.

"The Abbe Barthelemy, in his elegant Travels of Anacharsis, speaking of the plague in Athens, says, 'it was doubtless 'brought into Greece by a vessel from Egypt.' It is to be regretted that such an accurate and judicious writer should have indulged conjecture on this interesting subject. He quotes no authority for his opinion, and the words of Thucydides oppose the supposition. The disease first appeared in the Piræus, the harbour; and so ignorant were the people of the cause, that they ascribed it to the poisoning of the wells

wells by the Lacedemonians. Besides, Thucydides impliedly acknowledges that he and others knew nothing of its origin; for he calls 'on every one, physician or not, to assign any 'credible account of its rise, or the causes powerful enough 'to produce it.'

"Plutarch, in his Life of Pericles, says, the enemies of Pericles attributed this disaster to the multitude of people he had collected into the city during the heat of summer; a charge in which there was much truth.

"But when we attend to the violent concussions of nature that accompanied and followed the pestilence, and its general prevalence in the world for a series of ten or twelve years, all attempts to trace its origin to infection dwindle into puerilities; and the occasional causes of sickness, crowded population, heat, and bad diet, though powerful as auxiliaries, could not be adequate to the violent and continued effects in Athens and the neighbouring cities."

We shall give a few more instances of comets, earthquakes, or hurricanes, preceding or accompanying pestilence.

Between the years 14 and 16 of the Christian æra there was a great famine in Rome, and in the East a pestilence, and twelve cities were overthrown by earthquakes in Asia Minor. A comet is reported by Dion Cassius to have appeared about the same time. "The close of the reign of Claudius, and the beginning of the reign of Nero, A.D. 53 and 54, were marked by a similar train of phenomena and calamities. A comet is noted by Suetonius and Pliny about the year 54, the year in which Claudius was poisoned. Tacitus relates, that people were alarmed by frequent shocks of earthquakes, which demolished many buildings, and great dearth of corn prevailed in Rome and Greece. Pliny records that three suns, by which are doubtless intended halos, or mock suns, appeared the same year. These were considered by the ancients as prodigies; but, though common phenomena, they are remarkably luminous, and frequent in the periods of pestilence.

"The

"The next pestilential period is one of the most remarkable, in all the circumstances, that is recorded in history.

"In the year 79, just before the death of Vespasian, appeared a comet with a long coma, in the month of June. On the 1st of November following, a most tremendous ebullition of fire and lava issued from Vesuvius, and laid waste the neighbouring country. At the same time happened a violent earthquake, which buried the cities of Herculaneum and Pompeium; and so sudden was the shock, that the people, who were attending a play, had not time to quit the theatre, and were all buried in a mass.

"This dreadful catastrophe was preceded by rumbling noises in the earth, and the earth was heated to a great degree. Violent agitations of the sea, thunder and lightning, also announced the approach of some dreadful event.

"The eruption lasted three days, during which time such immense quantities of ashes and smoke were discharged, that day was turned into night, and the ashes were driven by different winds to Rome, Syria, and Africa.

"The agitations of the earth and the elements were tremendous and frightful. Baronius remarks, that some persons supposed the world would be reduced to chaos, or consumed with fire. The fish in the neighbouring seas were destroyed.

"This explosion of subterranean fire was preceded by a severe drought in Italy. The next year, 80, was remarkable for a terrible inundation in England; the Severn overflowing a large tract of country, and destroying multitudes of cattle.

"These violent effects of subterranean fire were attended by one of the most fatal plagues recorded in history. A remark of Dion is here very important: he says, that the 'ashes 'from Vesuvius caused, at the time, only slight indispositions 'or diseases, but afterwards produced an epidemic distemper.'

The

The remark is incorrect, in ascribing even slight diseases to ashes; but it leads to a conclusion which is of moment. The slight complaints which prevailed in the autumn of the year of the eruption, compared with modern observations, appear to have been the precursors of the plague which broke out the next year, and, as authors assert, destroyed, for some time, ten thousand citizens of Rome in a day. The same year, while the Emperor Titus was viewing the ruins in Campania, a fire broke out in the city, which laid in ashes a great number of buildings.

"The order of the events in this period was a comet, drought, slight diseases, and an eruption of Vesuvius, with the earthquakes, the first year. In the second appeared the pestilence, with its most malignant effects.

"In this eruption of Vesuvius, the first recorded in history, perished the elder Pliny, and the Emperor Titus fell a victim to his paternal care of his subjects.

"During the time that Trajan was making war on the Agorini, a people of Arabia which had revolted from the Roman government, flies in myriads appeared, and covered every vessel and utensil, so that the Emperor was compelled to abandon the expedition. This was near the time of the earthquake which destroyed Antioch.

"This fact ought not to be omitted, as the generation of innumerable insects is one of the phenomena which generally attend a great pestilence. The same season was marked by terrible storms of wind, rain, and hailstones of unusual size."

That the plague was propagated by means of a subtle vapour transpiring from the bodies of persons infected with the disease, and that the poison might be carried to distant countries, and communicated to the inhabitants, by means of clothes, bales of goods, &c. was very early believed. The general and fatal pestilence which occurred in the year 167, in the reign of Marcus Aurelius Antoninus, was supposed to have arisen in Rome, from the vapour of a small box, or

chest, which a Roman soldier had opened in search of plunder after the taking of Seleucia. "That a close box," our author says, "or other confined place, which might have been shut for ages, should contain a pestiferous vapour which might destroy the life of the man that first opened it, is not only possible, but very probable; but that this trifling quantity of noxious air should be sufficient to generate an universal pestilence from the confines of Persia to Gaul, is a vulgar notion, precisely resembling the modern opinion, that the plague is conveyed from country to country in bales of goods.

"The historian adds, that the Emperor returned to Rome, and "*cum secum deferre videretur*," seemed to carry the plague with him. But the Romans passed only from Seleucia to Rome; whereas the plague raged over the whole earth; so that the disease must have originated in other countries, through which the Emperor did not pass, and from other causes than the noxious air of a little box. It raged in Gaul and in Scotland.

"By attending to the phenomena of the physical world during this period, we shall find causes fully adequate to the effect, without resorting to the Temple of Apollo in Seleucia. The state of the elements was deranged, and nature every where agitated. An inundation of the Tiber, at Rome, laid all the low grounds, and a part of the city, under water, sweeping away people, buildings, and cattle, and desolating the fields. Famine and earthquakes marked the same period. The air became insalubrious, and myriads of caterpillars and other insects overran the earth, and devoured vegetation.

"The pestilence was violent and mortal, corresponding with these symptoms of derangement in the elements. In Rome, at one time, it is related, that the mortality extended to ten thousand persons in a day. Its precise duration I do not find to be specified by historians; but it continued for a

number of years, in the midst of which appeared a comet, about the year 169."

On the same ground, we shall find our author ridiculing the practice of instituting quarantine, with the view of preventing the importation of infectious diseases. But although we should admit the influence of comets in rarifying and putting in action vapours confined in the bowels of the earth, thence occasioning earthquakes, eruptions of fire, storms, hurricanes, floods, &c.; and that by some, or all these causes, the qualities of the air may become changed or vitiated, so as to produce plagues, or other mortal complaints; and that, in the absence of these causes, or in countries not under their immediate influence, these diseases do not present themselves, or do not rage with so much violence; yet, as we know that, where kindled, they are communicable from person to person, by contact, by apparel, bedding, &c. we see no incongruity in supposing, that the fomes of these diseases may be imported in cotton or other goods coming from places highly infectious. Dr. Mosely, we recollect, gave the same opinion our author holds on this subject, in his Essay on Sugar, which we reviewed in our Fourth Number; but we trust, the precautions established in these cases will still be continued.

*(To be resumed next month.)*

---

ART. III. *Traité complet sur les Symptômes, les Effets, la Nature, et le Traitement des Maladies syphilitiques.* Par F. SWEDIAUR, D. M. 2 vols. Octavo. Paris. An VI. Price 14*s*. Imported by De Boffe.

MANY of our readers will probably recollect Dr. Swediaur's "Practical Observations on Venereal Complaints," which were first published at Edinburgh in 1784. That work having passed through a second edition in 1786, and a third in 1788, the author was incited to prosecute the subject, and has endeavoured

deavoured to accumulate the opinions of various continental writers, during his late travels in different parts of Europe. The facts and sentiments he has been able to collect are here presented to the world, in two octavo volumes, under the new title of a "Complete Treatise on the Symptoms, the Effects, the Nature, and Treatment of Syphilitic Disorders." How far this work merits the epithet of a *complete treatise*, we leave to the decision of our readers. It is undoubtedly a performance of value, and differs in many respects from the original production of the author; but, in handling some parts of his subject, we think he inclines too much to the evanescent theories of the day.

The nature and treatment of gonorrhœa, which is here called *blennorrhagia*, appears to have occupied the author's chief attention. He regards this affection as a simple irritation in the entrance of the urethra, produced by acrid applications of various kinds, in the same manner as an increased discharge may be occasioned by irritating substances applied to the secreting membrane lining the nose. Hence it often happens, that this complaint is totally unconnected with the venereal disease, and cannot then be denominated syphilitic; although, on the other hand, it sometimes is produced by the virus of syphilis, and is followed by all its dire effects on the human constitution. To distinguish this complaint, therefore, in its nature and causes, is a matter of great importance to the patient, and requires the most exact discrimination; since a false diagnosis will infallibly lead to an improper mode of treatment.

In speaking of the swelled testicle, and its accompanying symptoms, the author endeavours to shew that it is only a sympathetic affection, arising from the irritating effects of the virus in certain parts of the urethra. His doctrine, he tells us, has been confirmed by the observations of the most enlightened practitioners in Europe.

The chapter on ischuria and dysuria contains many new re-

marks

marks well worthy attention. Dr. Swediaur enters particularly into the consideration of the causes of obstructed urine, and the different methods of cure; but he appears not to have done justice to the treatment of strictures by caustic-bougies, revived by Mr. John Hunter. "I think," says the author, "that no surgeon who really cares for the welfare of his patients, and his own reputation, will EVER employ the caustic, when the place whereon it acts is out of sight, and its operation is confined to parts so irritable." That there are cases in which this remedy is justifiable, and perhaps the only effectual means in our power, we have not the smallest hesitation in believing; although it is, certainly, a desideratum in surgery to point out precisely under what circumstances the caustic may and ought to be applied to the urethra.

The author has endeavoured, in his chapter on chancres, to lay down such distinctions as may enable practitioners to discern between those sores which are really venereal and those which are not so. He also discriminates between the various species of buboes, and the different treatment indicated in each. With good reason, he condemns the promiscuous use of mercury in all the disorders consequent on venereal intercourse; and shews that many of them may be cured without a grain of that mineral. The author concludes his first volume by some observations on fissures and excressences of the genitals, &c.

The second volume treats on the syphilis, or lues venerea, properly so called; wherein are considered all the symptoms, both external and internal, which depend on a general infection of the system. The fourth chapter in this volume treats on the syphilitic complaints peculiar to pregnant women and infants; a subject that has not, we think, sufficiently engaged the notice of practitioners. Dr. Swediaur then proceeds to give a table of the various mercurial preparations now in use, followed by chemical and practical remarks; after which, he enlarges on the modus operandi of

mercury,

mercury, and on the *new* remedies introduced as substitutes for that antidote. But here, we confess, the author's philosophy does not accord with our own; he adopts the hypothesis of mercury curing the lues venerea by oxygenating the system, and thereby neutralizing the virus which floats in the circulation. Hence he is induced to fall into the plan of curing the disease by acids only; a plan which we have lately had occasion to deprecate, as inefficient and delusive. (See the LONDON MEDICAL REVIEW for March, April, and June, pp. 54—66, 156—165, 333—349.)

The author next treats, in the eleventh chapter, on several internal medicines, especially vegetable substances, which at different times have been recommended in this disease. He then proceeds to mention certain disorders bearing a great analogy to syphilis; after which, he offers a few remarks on the ill effects of mercury, when it disagrees with the constitution. The last chapter contains some pertinent suggestions respecting popular prejudices; and the whole is closed with a valuable and copious *pharmacopœia syphilitica.*

To each of these volumes is prefixed an introduction, comprising altogether 116 pages. In the first, the author merely points out the general plan of his work; but in the second he endeavours to elucidate the history of syphilis. His observations, however, do not differ very materially from those of preceding writers on the same subject; and where he ventures to give an opinion of his own, we generally find him erroneous or paradoxical. He has copied most of his historical facts from Hensler, Sanchez, or Gruner; and he agrees with them in disbelieving the venereal disease to have originated in America. The argument on which he chiefly rests his opinion "is a letter written by Peter Martyr, in April 1488, five years before the lues appeared at Barcelona and Naples, wherein he evidently makes mention of this disease." Now this letter (which the author should have known) is manifestly wrong dated; since it alludes to an event that did

did not take place till the beginning of the sixteenth century, as Girtanner and others have clearly demonstrated. Upon the whole, we consider Dr. Swediaur's attempt to clear up the origin of syphilis as one of the least satisfactory parts of his performance.

---

## Art. IV. *Nisbet's Clinical Guide, Part III.*

(Concluded from page 413, vol. iii.)

"PARTURITION, or labour," the author says, "is distinguished by the following symptoms: pain of the uterine region, recurring at intervals of uncertain duration, and producing always pressure downwards; on examination, affecting more or less the os tincæ, with an increase of the pulse, and disorder of some functions during their continuance.

"From this definition of labour, uterine pain appears its leading characteristic; but towards the term of gestation every uneasiness in the hypogastric region is considered, by women themselves, as the commencement of this state: to form a proper judgment, therefore, certain circumstances are to be remarked, conjoined with the symptoms above described.

"The first of these is, that the term of gestation be completely elapsed; for in this a very great regularity prevails; and without some extraordinary cause women are seldom delivered till this period arrives.

"The second is, the effect of this uterine pain on the organ itself, which is displayed,

"1. By the orifice beginning to dilate, or feeling in a soft slippery state, while a thick mucus, tinged with blood, oozes from the glands at the neck of its cavity.

"2. By its nature being regular, periodical, and bringing into action the abdominal muscles.

"The true diagnostics of labour-pains are to be taken from the state of the uterine orifice, as affected by their pressure, their regularity, and intermission.

"As

" As pain then forms the leading characteristic of labour, it must be considered, in the human subject, as a state of disease, which is established both by the feelings of the sex themselves under it, and also by its comparative difficulty with that of the brute creation.

" This difficulty has given occasion to a division of labour into certain classes or kinds, according to the morbid circumstances with which it is complicated; and from observation of these, without adopting the plan of former authors, which we consider as not sufficiently extended, all labours we distinguish into five classes, by the names of the *natural*, *protracted*, *instrumental*, *manual*, and *anomalous*."

Labour is divided by the author into three stages, " the periods," he calls them, " of accession, dilatation, and expulsion." During the first stage, he says, " the connection between the uterus and placenta is in part loosened. The vessels of the decidua, connecting the ovum or bag to the uterus, are also gradually ruptured, and thus every part is prepared for the approaching exclusion; for, in every labour, we are to consider, that thousands of vessels along its surface are lacerated, and an evident destruction of organization produced, so that the organ is left in a raw inflamed state, which, on any cause of irritation being applied after delivery, is liable to have a sensible effect on it.

" The duration of this stage is very uncertain: in most women it lasts only a few minutes. In some, particularly those of a tense solid fibre, and in a first labour, where the under part of the uterus is not so completely dilated as afterwards, it has been known to last several days; the pains at the same time being as strong as those of the second stage, and bringing the uterus low into the pelvis, without having the smallest effect on the orifice, even the discharge from it not taking place.

" The pains of this stage are marked in general more by a grinding, or constant sense of uneasiness, than much pressure.

sure. Hence the difficulty of distinguishing labour, during this period, till the second stage properly commences.

" The second stage commences from the time that the pains, observing a regular recurrence, shew a sensible effect in dilating the uterine orifice, and terminate when its edges are obliterated, as marked by the rupture of the membranes; and we know it to have taken place by the waters beginning to form at the os uteri.

" The rupture of the membranes marks the completion of the second stage, in general, or takes place on the full dilatation of the uterine orifice; but, in certain instances, they continue entire even longer, and the whole ovum has been expelled at the full term of gestation complete. This many authors have considered as the most natural state of labour; but it is by no means to be wished for, as flooding, the most alarming circumstance in parturition, is thus endangered. What happens most frequently we are to consider as always the most natural state.

" After the rupture of the membranes, when the action of the uterus is resumed, the third stage of labour, or what may be termed properly the stage of expulsion, commences. The period when this action is resumed is very different in different cases. In some it proceeds almost instantly, and the uterine action continues regular, without any intermission, till the head is expelled; in others, and most commonly, there is a considerable suspension of pain. But, whenever the membranes break, the head generally fills up, more or less, the vagina, and the uterine orifice is retracted beyond the feel. If the space is not confined, it presses then, in a few minutes, against the perinæum, and the duration of the labour now depends very much on the resistance from the external parts; for the two points of resistance in this stage are, the protuberances of the ischia, or sphincter of the externum. As the perinæum yields, the tumour of the external parts begins to form, and the occiput, rising from under the arch of the pubes, begins to shew

itself during the pressure of pain without the pudendum. When, however, the perinæum is rigid, or possesses much elasticity, though apparently at the os externum, during the pressure of pain, it becomes again retracted within the vagina on its departure; and in this way the labour will often continue to proceed for several hours after the rupture of the membranes. This is one of the most painful states that can well be imagined for the patient; but it is not in general attended with danger, as a laceration of the perinæum is thus prevented, an accident which often happens in a first labour, though natural. But the parts, though long pressed on by the head, are not very liable to suffer inflammation, unless when fretted by the attempts of the operator."

Various attempts have been made to explain or shew the causes inducing labour-pains; our author examines the different theories that have been popular on the subject, shews in what they are each of them deficient, and then endeavours to explain it on other principles. This part, as leading too far into the regions of speculation, we shall pass over, and proceed to notice a few of the author's observations on the manner of conducting a natural labour. He prudently advises the accoucheur to be cautious in examining during the progress of labour, lest the membranes should be too early ruptured, or the parts of the woman fretted and inflamed. He cautions them against resisting the expulsion of the head of the child, under the notion of supporting the perinæum, as inefficient in preventing the laceration of that part, unless such a degree of force should be applied as would endanger rupturing the uterus. The author is equally averse to making any hasty attempts to bring away the placenta, or to leaving it entirely to nature. After waiting twenty or thirty minutes, or "until the patient complains of slight uneasiness in the uterine region, and previously ascertaining by the external feel of the abdomen the state of contraction, the accoucheur should gently assist the uterine efforts by twining the cord round the fingers of one hand, while the other is

applied

applied to it higher up, within the vagina, giving the proper direction for the exit of the placenta, by pulling the cord in a line with the centre of the pelvis, or as much as possible towards the sacrum. If the uterine efforts are exerted, the cord will be felt to lengthen at each pain; if the complete separation has taken place, one pain will be sufficient; if not, let an intermission take place, waiting the repetition of more, which will soon occur; and in this way the extraction will soon be completed."

In cases in which the placenta is detained, either from want of energy in the uterus to expel it, in which case there is danger of the woman being destroyed by hæmorrage, from a too early contraction of the cervix uteri, or from the placenta being diseased, and adhering too closely to the uterus, the author details the most approved method of extracting it.

The author next treats of protracted, or tedious labours. In these cases recourse must be had to bleeding, opening the bowels with glysters, the urine, if its passage be obstructed, must be drawn off by the catheter, and opium occasionally administered, to take off irritation, or appease the violence of the pain, as circumstances shall direct. The symptoms calling for, and rules for applying, these several remedies, are distinctly marked. If, after waiting as long as we safely may, the pains prove insufficient to exclude the child, recourse must be had to instruments. The author describes three kinds of instruments, or three modes of delivery by instruments, by the lever, the forceps, and by the crotchet and scissars. The two first are used where the impediment to delivery is not so great as to preclude the possibility of bringing the head of the child entire; the last where the pelvis is so contracted or distorted as to prevent the head of the child from being delivered, until it be opened and its bulk diminished.

The author allows a very limited use to the lever, which we are not surprised at, as the lever he recommends, "possesses," he says, p. 170, "a greater curve than the forceps,

so as to be applied accurately to the convexity of the occiput, that it may not slip after being applied; for it is generally," he adds, " more difficult to introduce it than the forceps, *the space being more confined,*" &c. From this circumstance, one would imagine the author has been accustomed to use the lever in cases where delivery could not be effected by the forceps; that is, either where the head is too high, or the pelvis too contracted and narrow to admit the introduction of the two blades of the forceps. In these cases, and indeed in every other case, we apprehend, it must be still more easy to introduce the lever, that is, a single blade of the forceps, than the two blades. But to give the lever power in such cases, the curve should be much less, instead of greater, than that of any forceps in use, which will also very much facilitate the introduction of the instrument. The author examines the different kinds of forceps that have been proposed, and ultimately recommends " the improved forceps of Dr. Orme, and the long ones of Mr. Pugh." He then describes the different cases in which the forceps may be advantageously used, with the manner of applying them; and lastly, in a clear and distinct manner, the method of opening the head of the child with the perforator or scissars, and extracting it with the crotchet, when, on account of the disproportioned size of the child to the pelvis, it is impracticable to deliver it entire.

" From the unavoidable cruelty," the author says, " that attends the use of the crotchet, in sacrificing the life of the child, different proposals have been made to supersede the necessity for it in future deliveries; and this has been attempted to be done in three ways: either,

" 1. By the management of the patient, during pregnancy, so as to prevent a complete evolution of the child, or retain it of an imperfect growth.

" 2. By a premature occurrence of labour, while its size is yet small; or,

" 3. By

" 3. By the enlargement of the pelvis itself, to admit its passage, of the ordinary size.

" The first is attempted by frequent small bleedings during gestation, an abstemious regimen observed by the mother, and other modes of inanition. Such authors, however, as have proposed this method, have not reflected on two circumstances which shew the inefficacy of such a mode of treatment. In the first place, the smallest and most debilitated women have frequently the largest children, which demonstrates that the growth of the fœtus does not depend on the state of the mother; and, secondly, the nourishment is derived from the placenta, or the temporary appendages of the uterus. Hence, it must be their state, not that of the general system of the patient, which must determine the increase of the fœtus; and their state it is not in our power to alter, while the debility induced by such a mode of treatment, during pregnancy, renders the patient incapable of bearing the fatigues of labour, or that method of assistance which may be necessary to the expulsion of the child.

" The bringing on premature delivery has been often proposed, and in some cases attempted, though not with that success which, from superficial consideration, we might expect. It proceeds on that observation of children frequently surviving when born in the seventh or eighth month, while the ossification of the head is then so loose, as well as its size smaller, that it can bear a degree of compression at least one third more than at full time, and the patients have been known to recover equally well as after a delivery at full gestation. But if we reflect on this proposal, many objections may be offered to it.

" 1. In the first place, we cannot ascertain the exact period of gestation, and hence the period when this delivery may be properly attempted is uncertain.

" 2. The size of children, in different pregnancies, vary much in the same subject; and they are frequently born in the

the seventh or eighth month equally vigorous as at the full time.

" 3. The success of delivery, at a premature period, is opposed by several circumstances; for,

" 4. The extension of the uterus has not fully taken place, consequently a resistance must be formed by the action of the cervix to the action of the fundus, rendering the labour tedious and painful.

" 5. The early exclusion of the waters, with this view, before the uterine orifice has been in the least dilated, will increase the former difficulty; and,

" 6. The child itself, from the tediousness of the labour, and its own imperfect state, may suffer so much by the increased action of the uterus necessary to effect it, as to terminate its existence in the course of delivery; while, to the patient herself, there is always danger of considerable hæmorrhage, which may render it necessary, for her safety, to hasten the delivery, without regard to the situation of the child.

" For the reasons then detailed, as the success of this practice, in the most favourable circumstances, is precarious, from our uncertainty of the size of the fœtal head, and the exact degree of distortion in the pelvis, and as real danger for the most part attends it, it is a step that cannot, with any degree of prudence, be imitated; and though it may have succeeded in a few cases, they by no means deserve to be followed; or it requires a previous knowledge of the circumstances of the case, much greater than what can be usually acquired by the common attendance on labour."

From the success, however, attending this operation, under the direction of Mr. Barlow (See p. 377 of the last Number of this Review) we cannot help entertaining a favourable opinion of it, and repeating our wish, that other practitioners may be excited to follow his example.

The author gives a succinct account of the Sigaultian operation (the section of the symphysis pubis), instituted with the

view of superseding the use of the crotchet; and after examining the arguments by which it has been recommended, ultimately decides against it.

When it is absolutely impracticable to deliver the child through the natural passage, the Cæsarean operation is sometimes had recourse to. After giving the opinion of various authors upon this subject, and describing the different modes of performing it that have been recommended, he says: "To account for its fatality, we observe, that when any point of the surface of a cavity becomes inflamed, it possesses, independent of the admission of the air, a tendency to spread; and the consequence of this last is its termination either in adhesion or suppuration. The former is the most favourable termination; and with this view, an accurate restriction of the divided parts, as formerly recommended, which favours adhesion, should be studied; for if once suppuration takes place from the exhausted state of the patient, and the long continuance of irritation on the system, in consequence of this process, death must unavoidably ensue. Yet the quantity of discharge which necessarily arises from such a large wound, as both that in the uterus and teguments, must almost always prevent adhesion; and it is therefore more this circumstance, perhaps, of the formation of matter within the cavity of the abdomen, or the extravasation of fluids, preventing an early termination of the disease by adhesion, that is to be considered as the cause of death, than the mere temporary admission of the air in the operation; the one forming an accidental, the other a continued irritating cause; while, in the inflamed state of the cavity, the absorbents are unfit for removing any portion of the extravasated fluid before this termination takes place. Hence the necessity for the removal of every extraneous matter from the abdomen before the lips of the wound are placed in contact, and of occasionally removing the dressings, that a discharge from the abdomen, preventing the formation of pus, may arise; and though the admission

of

of the air is thus endangered, it will be found less troublesome than matter formed in the cavity of the abdomen."

The account of manual labours follows, or those in which, some other part than the head of the child presenting, it is necessary to bring it by the feet. The rules to be observed in turning the child, and for managing labours of this class, are concise and judicious.

Under the head of anomalous labours, the fifth division, the author treats largely of flooding and convulsions, two of the most formidable accidents that occur in parturition. His observations on these subjects are highly deserving attention, but will not readily admit of being abridged. We shall also refer our readers to the volume for the author's directions in cases of prolapsed funis, of plurality of children, and of extra uterine labour, which completes his observations on parturition.

The manner of treating women in childbed follows. The rules here laid down are such as are followed by the most experienced and accredited practitioners; as such we recommend them to be carefully studied by Tyro's in the art. The prognostics in midwifery, which form the next book, or section, appear to be well considered, and may in general be depended on.

Under the title of an obstetrical pharmacopœia, the author has given an ample catalogue of drugs and preparations, which may be applied to in remedying the various complaints incident to pregnancy and parturition, and has marked the proper doses of each; then a classification of the same articles, arranging them according to their qualities, under the heads of emetics, cathartics, diuretics, &c.; and lastly, what he calls extemporaneous prescription, or an enumeration of the several diseases incident to pregnancy, parturition, or childbed, with the method of treating them. We will close our account of this ingenious and useful volume with a short extract from this part.

"Con-

"Convulsions are to be treated," he says, "by removal of uterine irritation, by venesection, and clearing the intestines, by sedatives applied to the part, or opiate injections; and,

"By a counter stimulus applied to restore the energy of the brain; as, dashing the face with cold water, &c.

"*Dropsy.*—Ascites admits the operation of tapping being performed during pregnancy, if symptoms are urgent, the puncture being made on the opposite side to that to which the uterus inclines. When no urgent symptoms occur, diuretics to be used till after delivery."

---

ART. V. *Des Caracteres, du Traitement et de la Cure des Dartres, et de la Paralysie des Extrémités inférieures; des Convulsions, de la Coqueluche, de l'Epilepsie et du Tetanus; de la Vomique et de la Phthisie tuberculeuse, &c. par l'Usage du Rhus-radicans, du Narcisse des Prés, des Champignons meurtriers, &c.* Par ANDRE' DUFRESNOY, Medecin et Professeur Botanique à Valenciennes. Octavo. A Paris. An VI. de la Republique.

M. DUFRESNOY published, in 1788, some observations on the medical properties of the rhus-radicans and meadow-narcissus. Of these an account was given in the seventeenth volume of Duncan's Medical Commentaries. The present work is an enlarged republication of them, containing general observations on the diseases in which the author has found these new remedies of service, and the result of his experience of their use since that time.

In his preliminary discourse, he presents us with a sad picture of the present state of society and literature in France. He commences by telling us, that he would not dare to expect the attainment of his views in publishing the present work, did he not rely on the interest he thinks it calculated to ex-

cite, considering how very common the diseases are which he proposes to relieve.

Politics, stock-jobbing, and intrigue, are the sole objects of attention at present; and a misunderstood personal interest but too often isolates man from man, and appears to many a sufficient excuse for becoming indifferent to the public good, and to whatever regards humanity at large *. The Gazettes alone are now read, and egotism is become the universal rule of conduct. The pamphlets of the day, the perpetual support of factions and malignity, and a few writings destructive of good taste and morals, constitute, in France, the whole literature of the end of the eighteenth century, the illumination of which has been extolled so much: the sciences and arts, even the most useful, are neglected, and totally abandoned.

After premising some general observations on the healing art, and those diseases in which he has found his remedies of service, M. Dufresnoy proceeds to treat of the rhus-radicans. A young florist had handled this plant too freely in the botanic garden of Valenciennes; next day he complained of a troublesome itching in his hands and fingers; it was mistaken for the itch, and he was advised to rub himself with the ointment of nitrate of mercury, and to purge himself with mercurial pills; but the day on which he was purged the itchiness increased, and the fingers and hands began to swell, and to be covered with a number of small pustules, which convinced him he had actually got the itch. His hands were again rubbed with double the quantity of ointment; but next morning, the swelling having increased during the night, they were covered with a multitude of small vesicles, which, increasing in size for seven or eight days, became

* The reviewer of an article in the sixth volume of L'Esprit des Journaux, for Ventose, An VIII. page 35, bears testimony to the miserable state of the hospitals in France: he says, they are in the extreme of penury, wanting both provisions and medicines!

filled

filled with a yellow serosity, announcing a troublesome erysipelas.

Notwithstanding blood-lettings, baths, emollient fomentations, and diluent ptisans, the head swelled so much, that he was blinded by the enlargement of the eyelids. The itchiness afterwards extended over the whole body, especially the hairy scalp and parts of generation, which he tore by scratching. In ten days these symptoms ceased; the cuticle peeled off from the fingers, which had exuded a good deal of serosity; and the patient was astonished to find himself perfectly freed from a troublesome herpetic complaint, with which one of his fingers had been affected more than six years, and which had resisted frictions, the strongest doses of corrosive sublimate, and other remedies prescribed by the most enlightened practitioners of the neighbourhood. It has never returned.

M. Dufresnoy, being convinced that the herpes was cured in this instance by the action of the rhus-radicans, resolved to try it in the different varieties of herpes. He prescribed it under the form of a weak infusion, or the distilled water of the leaves in very small doses. Its sensible effects are not pointed out; but its success seems to have been constant, and is confirmed by letters from Van Mons of Brussels.

Accident also discovered to our author the advantages to be derived from this plant in the cure of paralysis. After having proved upon himself the safety of the extract, he began by administering two grains of it four times a day, but gradually augmented the dose to the extent of a drachm. The patient got completely rid of his paralytic complaint, but without experiencing any sensible effect from the remedy. In one case it was even prescribed the length of five drachms four times a day, without exhibiting any more active operation; nay, some paralytics, he says, have taken an ounce of the extract three times a day without any inconvenience. As there are individuals who can bruise the plant with impunity,

our author thinks it would be interesting to learn if the same persons resist its action both externally and internally.

It was employed in about twenty cases of paralysis with more or less success; but it seems to have produced the greatest advantage in affections of the lower extremities. The good effects of the rhus in paralytic complaints are confirmed by communications from De Blegny, Rumpel, Van Mons, and Kock, who has published his experience of its virtues.

The cause which first induced M. Dufresnoy to employ the flowers of the narcisse des pres in convulsions, has already been noticed in the Medical Commentaries. In the present performance he proceeds to give further proofs of their efficacy in spasmodic diseases. They seem to have been particularly successful in the chin-cough, given in the form of a syrup, to the extent of from half a drachm to half an ounce: the syrup was composed by boiling four ounces of the dried flowers for five or six minutes in a pound of water, to which was added a pound of white sugar; the mixture was then clarified with whites of eggs, strained, and evaporated to the consistence of syrup. Its action was that of an extremely mild emetic, and it was always readily taken by the patients.

He also made use of the infusion and extract of the same flowers with wonderful success in epilepsy and tetanus. The infusion was composed of a pound of water, to which the number of flowers added was gradually increased from three to sixteen or twenty, and drunk after the manner of tea. The dose of the extract was gradually augmented, as long as it produced no bad effects; in one case it was given to the extent of two drachms twice a day.

Francis Mason, aged 38, after an excess of debauchery, had been seized with an attack of epilepsy, which lasted almost an hour, and recurred three times the same day with equal violence. This disease had now continued two years, the fits returning from three to six times a day; and for the last six months

months he had become perfectly blind, when he was brought to the Hotel Dieu of Valenciennes. On the first complementary day of the fourth year he got four grains of the extract of narcissus; next day he took six grains morning and evening, and the dose was thus gradually augmented to the extent of forty grains twice a day. The 19th Vendemiaire they were become shorter, and less violent, but were not diminished in frequency. 29th, he had but one in twenty-four hours. From the 20th to 30th Brumaire he had only seven, and considerably shorter. From the 1st to 20th Frimaire, only two. From the 20th to 11th Nivose, but one. As the pupil was dilated, and his blindness seemed to depend on a paralytic state of the optic nerves, it was determined to make trial of a combination of the extracts of rhus-radicans and cicutaria aquatica; and accordingly, on the 14th, he took two grains of the latter, and twenty of the former, twice a day. Next day the dose was doubled, and increased, until he took forty grains of the extract of cicutaria, and two drachms of that of the rhus, morning and evening. On the 3d Pluviose he could distinguish light for the first time for seven months. On the 6th Ventose he could perceive objects confusedly; and on the 21st, he persisted in quitting the hospital, to return home, though not yet sufficiently recovered to recommence his occupation. The same remedies were also successful in a case of amaurosis. A lady, while giving suck, was imprudently told that her husband was guillotined. This unexpected intelligence brought on frequent fits of fainting. She was put to bed, and in the morning awaked deprived of sight. After various remedies had been tried in vain, a complete cure was effected by the rhus and cicutaria.

In treating the tetanus and epilepsy of St. Domingo, excellent effects resulted from the use of the extract of narcissus. Two cases of tetanus are also detailed, which were cured in the hospital of Valenciennes by the use of the same remedy.

The

The advantages derived from the employment of the dried powder of the agaricus piperatus and deliciosus, in pulmonary complaints, constitute the subject of the third part of these Observations; but the cases are too vaguely related, and the practice too complicated, to authorize any conclusion with regard to their real efficacy.

---

ART. VI. *Chemische Annalen für die Freunde der Naturlehre Arzneygelahrtheit, Haushaltungskunst und Manufakturen.* Von LORENZ VON CRELL, der Weltweisheit und Auzneygelahrtheit Doctor, &c. &c. *i. e. Chemical Annals for Amateurs of Natural Philosophy, Medicine, Husbandry, and Manufactures.* Octavo. 88 pages. 1800. Imported by GEISWEILER, Parliament Street. Price 18*s.* for the twelve yearly Numbers.

THIS is the first number of a periodical work, which will be continued regularly every month, by the celebrated Von Crell. This respectable author promises to deliver the eleventh and twelfth numbers of his Annals of Chemistry for the year 1799, with the second and third of the present series. The number before us contains:

1. A chemical Analysis of the Melilithus, *(Honigstein,)* by M. Klaproth.

2. On the Tungsteinate of Soda, by Count von Mussin-Puschkin.

3. A Notice respecting two new Methods of obtaining the Carbonate of Potash, by M. Lowitz.

4. A chemical Analysis of a black Feldspar, found at an extinguished Volcano at Unkel, by M. Tromsdorf.

5. An Analysis of Copper, by Professor Proust.

6. A comparative Analysis of the Milk of two Cows, fed with common Food and with Turkey Wheat, by M. Deyeux.

7. A

7. A Receipt of a Lotion for destroying Caterpillars and other Insects, by M. Tatin.

8. An Inquiry into the best Means of depriving Molasses of its unpleasant Taste, so as to form a Substitute for Sugar; taken from the Ann. de Chim. tom. xvii. p. 111. This process consists in boiling, for a few minutes, twenty-four parts of molasses, and six parts of powdered charcoal, in twenty-four parts of water; keeping the mixture constantly stirred, and then straining the liquor, which, after evaporation to a due consistence, yields twelve parts of good syrup.

---

ART. VII. *A Lecture on the Preservation of Health.* By T. GARNETT, M.D. Professor of Natural Philosophy and Chemistry in the Royal Institution of Great Britain, &c. Second Edition. Duodecimo. 115 pages. CADELL and DAVIES, London. 1800. Price 4*s*.

THE first edition of this little work was published in the year 1797, before the commencement of our labours. It is now republished without any addition, but with a more beautiful type and paper, and decorated with an engraved head of the celebrated lecturer.

In the first part the author explains the laws of life, as they are called, on the principles of the late Dr. Brown, and of his disciple, Dr. Darwin. This he seems to have thought necessary, in order to make the rules he lays down for the preservation of health completely intelligible.

Life consists, according to this doctrine, in a principle of excitability, or a power of being excited and put into motion by external objects. When this faculty is abundant, we are said to be in a state of accumulated excitability; when deficient, the excitability is said to be exhausted. The bodies exciting us are heat, air, and food. Abstract these bodies, or keep them from us for a certain time, the author observes, and we should

should all die, vegetables as well as animals, for they are subject to the same law. To apply this doctrine to practice: when any of the exciting objects are applied with too great force, or for too long a continuance, they are said to exhaust the excitability. Upon removing ourselves from the exciting objects, the excitability is again restored; but if the exciting objects are applied beyond a certain degree of force, or continuance, the excitability becomes so completely exhausted, as to be incapable of being restored, or, in other words, the part of the animal, or vegetable, or the whole of it, dies.

On the other hand, by abstaining or subtracting ourselves from all exciting bodies, the excitability is at first restored, then becomes accumulated, and at length kills from excess. Thus a moderate portion of heat excites or refreshes; an excess of heat destroys; not, as was formerly taught, by destroying the texture of the part, and occasioning mortification, but by exhausting the excitability. Abstract heat, that is, expose ourselves to cold, excitability is restored, accumulates, and at length life is destroyed; not, again, by the pores being obstructed, the capacities of the vessels contracted, and the circulation stopped, as we used erroneously to say, but by an excess of excitability.

Exercise long continued, we know, diminishes the strength and spirits, which are recruited again by rest and proper refreshment. We are now to say, exercise exhausts the excitability, which is recruited, or accumulates, in a state of quiescence. But long-continued rest exhausts the spirits, and renders us also incapable of labour, which is not easily explained, or accounted for, from accumulated excitability; nay, indolence, we know, dulls all the senses, instead of sharpening them, which it ought to do on the new principle.

This philosophy, therefore, furnishes us with a new set of terms, but no additional knowledge; it rather perplexes and confounds, than explains; it leads to the discovery of no new

modes by which health may be preserved, or restored, or death averted.

The rules here laid down are drawn from experience, the only sure basis on which the science of medicine can be supported, and are such as have been taught from the earliest ages. Moderation in diet, and a due proportion of exercise in the open air, are the objects principally noticed by the author. "Be therefore temperate in eating, and eat only of such foods as are the plainest; and let a proper quantity of vegetable food be mixed with animal. If you value the preservation of health, never satiate yourselves with eating; but let it be a rule from which you ought never to depart, always to rise from table with some remains of appetite: for, when the stomach is loaded with more food than it can easily digest, a crude and unassimilated chyle is taken into the blood, pregnant with diseases. Nor is the quantity the only object of attention; the quality of the food is to be carefully studied: made dishes, enriched with hot sauces, stimulate infinitely more than plain food, and therefore exhaust the excitability, bringing on diseases of indirect debility; such as the worst kind of gout, apoplexy, and paralytic complaints. 'For 'my part,' says an elegant writer, 'when I behold a fashion-'able table set out in all its magnificence, I fancy that I see 'gouts and dropsies, fevers and lethargies, with other innu-'merable distempers, lying in ambuscade among the dishes.' Let it be therefore laid down as a rule by those who wish to preserve their health, and I have nothing to say to those who are indifferent on that head, to make their chief repast on one plain dish, and trifle with the rest." And a little farther on: "Would you be happy, be temperate; temperance is the parent of health, virtue, wisdom, plenty, and every thing that can make you happy in this world or the world to come. It is indeed the true luxury of life, for without it life cannot be enjoyed.

"Of all the various methods," the author says, "of pre-

serving health, and of preventing diseases, which Nature has suggested, there is none more efficacious than exercise; it puts the fluids in motion, strengthens the solids, promotes perspiration, and occasions the decomposition of a larger quantity of atmospheric air in the lungs. Hence, in order to preserve the health of the body, the Author of Nature has made exercise absolutely necessary to the greater part of mankind for obtaining the means of existence.—Had not exercise been absolutely necessary for our well-being, says the elegant Addison, Nature would not have made the body so proper for it, by giving such an activity to the limbs, and such a pliancy to every part, as necessarily produce those compressions, extensions, contortions, dilatations, and all other kinds of motions, that are necessary for the preservation of such a system of tubes and glands.—And that we might not want inducement to engage us in such exercise of the body as is proper for its welfare, it is so ordered, that nothing valuable can be procured without it. Not to mention riches and honours, even food and raiment are not to be come at without the toil of the hands and sweat of the brow. Providence furnishes materials, but expects that we should work them up ourselves. The earth must be laboured before it gives its increase, and when it is forced into its several products, how many hands must they pass through before they are fit for use? Manufactures, trade, and agriculture, naturally employ more than nineteen parts of the species out of twenty; and as for those who are not obliged to labour by the condition in which they are born, they are more miserable than the rest of mankind, unless they indulge themselves in that voluntary labour which goes by the name of exercise."

The work concludes with some short hints on the best mode of exercise. Dr. Garnett recommends riding in preference to walking, and very properly suggests, that our exertions should be gradually increased.

ART.

ART. VIII. *De Pneumonia Typhode sive Nervosa; adnexis hujus Morbi Historiis.* Auctore M. C. G. CAPPEL, M.D. Octavo. 216 pages. Göttingen. 1799. Price 3*s*. Imported by GEISWEILER.

IT may perhaps be thought presumptuous that the author, a young man almost destitute of experience, should have ventured to write on a difficult practical subject: but as he has, for nearly a whole year, frequented the lectures of the illustrious Frank, in the Clinical Institute at Vienna, he thence derived much useful information; and especially from the Clinical Wards of the celebrated Dr. Nord, first physician to the Great Civil Infirmary in the same city, where cases of pneumonia daily occurred: besides these valuable sources, he says he has also perused the best writers on the subject.

In an ingenious preface, the author apologizes for having undertaken to write on a particular species of pneumonia, while it is supposed that every thing relative to that disease has been duly considered by so great a number of ancient and modern writers. He therefore advises those who are of this opinion, to reflect upon the diversified principles laid down by authors respecting that disorder, and to decide, after a careful comparison, whether the different species of it are sufficiently distinguished, whether the diagnosis of each writer is properly explained, and whether the method of cure itself be duly investigated. Dr. Cappel, without hesitation, answers these questions in the negative; and he endeavours to prove the neglectful conduct of physicians, in this respect, by the great diversity of opinion concerning several of the remedies; so that some consider venæsection indispensably necessary, while others absolutely reject it; and others again fluctuate between the two extremes. This censure is farther justified by the uncommon praise bestowed upon one and the same remedy in every species of pneumonia. Hence the author is induced to believe that, notwithstanding the many excellent

writings on this subject, neither the different nature of the disease, nor the method of cure, has been accurately stated. And as it is one of the most difficult and dangerous maladies which afflict mankind, and frequently proves fatal, it appeared to him deserving the inquiry of medical men, especially for the following reasons:

The species of pneumonia are frequently so difficult to be distinguished, that even the most sagacious physician cannot with certainty determine the precise nature of the disease. In the next place, the practitioner to whom the cure of it is intrusted cannot delay his active measures for several days, so as to abstract the method of cure from time and circumstances; but his duty requires the immediate choice and application of remedies against so dreadful an attack. Lastly, the physician has here an opportunity of displaying, in a very eminent degree, his practical talent; as there are few diseases, the event of which, whether favourable or fatal, depends so much on his advice and ingenuity as that of pneumonia.

In the first place, Dr. Cappel shews the manner of distinguishing and ascertaining the inflammatory symptoms accompanying pneumonia: and he is of opinion, that in fever combined with inflammation this should first be attended to, and that there ought to be admitted as many kinds of inflammation as there are genera of fevers. He next examines the various divisions of fever proposed by Doctors Selle, Frank, Hufeland, Reiland, and Brown; the last of which the author considers as the best, and adds a few observations on the origin of fevers.

Among the most useful external remedies, the author reckons warm cataplasms, tepid baths of the feet and the whole body, volatile liniments, tepid vapours, sinapisms, and blisters: in the list of internal remedies he has placed the aqua ammoniæ acetatæ, polygala senega, kermes mineral, emetics, camphor, musk, mercury, Peruvian bark, and opium.

From the annexed six histories of pneumonic cases we learn,

learn, that four of the patients were cured, one dismissed incurable, and only one died. It deserves to be remarked, that all these cases occurred under the direction of the celebrated Franks, father and son, who seldom prescribe venæsection in pneumonia, and never in that of the typhoid, or nervous kind.

---

ART. IX. *Memoires de l'Institut National des Sciences et des Arts. Tome I.* Quarto. Paris. An VI. Imported by DE BOFFE. Price 1*l.* in boards.

THE National Institute of France consists of 144 members resident in Paris, and the same number of associates in the departments: besides which, twenty-four learned foreigners are admitted as honorary members. The Institute is distributed into three classes, viz. 1. Mathematics and Physics.—2. Morality and Politics.—3. Literature and the Fine Arts.—Each of these classes is subdivided into various sections, and each class has produced a quarto volume for the year 1798, containing about 650 pages *.

The volume before us comprehends all the mathematical and physical papers, including several essays upon medical, surgical, chemical, and anatomical subjects, the principal of which we proceed to notice.

The first memoir of the volume is upon the morbid protrusion of the tongue, by Pierre Lassus. This disease, which he proposes to name *prolapsus linguæ*, is of rare occurrence. It takes place sometimes immediately after birth, and sometimes during the early periods of infancy. In either case, if not attended to, it gradually increases, and seems to be incurable by the powers of nature. The tongue is protruded in some cases very considerably upon the first appearance of the disease; and in other cases its progress out of the mouth is

* Since this article was sent to the printer, we have received three other volumes (or parts) for the year 1799.

gradual. By degrees it becomes swelled and elongated; and, in proportion as it does so, it drags along with it the os hyoides and the upper part of the larynx, and hence adds to the difficulty of swallowing. There is a constant and great discharge of saliva. The lower jaw is always depressed, and is forced a little forwards; the under lip is inverted and enlarged; the fore teeth of the lower jaw are at first thrust forwards, and partly forced out of their sockets; and are afterwards, by the continued pressure and the frequent motion of the tongue, excluded altogether: the tongue itself is subject to excoriation and bleeding; it is always more or less swelled, and hangs over the chin.

Such are the symptoms that constitute the most violent degree of the disease; they do not entirely impede speaking or swallowing, but they render the voice hoarse and the deglutition difficult. Although the disease be never removed by any natural process, yet it is from time to time considerably alleviated, the swelling becoming less, and the tongue receding partially within the mouth.

M. Lassus considers the enlargement and elongation of the tongue, to be the effects, and not the causes, of the disease; for he imagines the cause to be a bad habit, or a convulsive action similar to that in suffocation or in epilepsy, or both combined.

With respect to the mode of treating this unusual disease, he reprobates the ancient practice of cutting off the lengthened portion; and recommends, that after the swelling and excoriation shall have been removed by suitable means, the tongue should be reduced to its natural situation, and retained there till the habit be subdued. For this purpose, where the disease occurs in infants, he advises that the jaws be kept close together by a bandage for several days, and that the infant be fed instead of being allowed to suck, as suction tends to increase the disease. For adults, he recommends the bandage commonly prescribed for wounds of the tongue, which has

the

the effect, he says, of forcing back that organ, as well as of retaining it in its proper situation. Several cases are related, where, by these simple expedients, not only infants were cured of this shocking deformity, but even also adults who had laboured under it for many years.

In the next memoir, Desessartz records the history of a spontaneous separation of the tibia and fibula at their middle part, in a case of gangrene of the leg, by which a complete cure was effected.

Van Mons, in the following article, examines the facts adduced by Girtanner in favour of his opinion on the nature of the basis of the muriatic acid. After having reviewed the different experiments, he thus concludes: "We are still at a loss, whether to decide for or against the opinion of Girtanner. The uncertainty of these experiments arises from the difficulty of determining whether it be the water or the acid that is decomposed, and that furnishes the hydrogen gas. It seems certain, that Girtanner has formed his conclusions more from analogy than from the result of his experiments. The facility with which, according to his opinion, the formation of the large quantity of muriatic acid that saturates the soda in the sea-salt could be explained, must have in some measure misled him; but that supposed composition of the muriatic acid does not explain the formation of the soda, nor does it remove the equally great difficulty of comprehending the process by which nature oxygenates the water," &c. He adds, that he ought also to correct an error in reasoning into which Girtanner has fallen. Girtanner says, that water is to the muriatic acid what atmospherical air is to the nitric acid. But here Van Mons asks, "Is it possible to compare a state of combination to that of simple mixture?" Girtanner should say, "Water is to the muriatic acid what the oxyd of azote is to the nitric acid. And it ought also to be observed," he adds, "that acids favour very strongly the decomposition of water."

The next memoir, entitled, New Experiments, tending to ascertain

ascertain whether Hydrogen forms the Basis of the muriatic Acid, is a continuation of the subject by the same author. He admits that these experiments (seven in number) are extremely nice, and require being conducted on a large scale, in order to furnish decided and conclusive results. But he says, his experiments have this in their favour; they confirm the assertion that Girtanner is in the wrong, when he concludes from his experiments, or rather from the facts hitherto ascertained, that hydrogen forms the radical of the muriatic acid.

Observations on the crystallizations called zeolites, and on the electrical properties of some of them, by Hauy, constitute the next article.

This author divides the substances called zeolites into four kinds; and, after having pointed out the distinctive marks of each, he observes, that the first kind, or that originally described by Cronstadt, alone possesses the remarkable physical quality, that it becomes electrical by mere heat alone without the assistance of friction. This property it retains for some time after having cooled; a fact which he has verified by the examination of specimens brought from different countries. He found, too, that a silk thread was attracted by the pyramidal extremity of the crystal, and repelled by that which had been attached to the mass of crystallizations; and hence he concludes, that the apex possesses the negative, and the base the positive electricity. It has been long known, that the tourmaline and the topaz have similar properties; and M. Hauy has since discovered them also in the oxyd of zinc, called calamine, and in the calcareous borate: in the latter of these the primitive form is a cube; four angles of it possess one kind of electricity, and four the other. To these substances the zeolite may be added, making a list of five, which our author in vain endeavoured to augment, by the examination of all the minerals he could collect.

The next two memoirs are by Pelletier. In the first he describes a process, by which the elastic gum may be readily

readily dissolved in the vitriolic æther, the solution forming a transparent varnish, well adapted to defend objects of natural history from the air and from insects. His method is, to boil the elastic gum for an hour in common water, then to cut it into very thin slices, and again boil it as before; and finally, to put it into a retort with a sufficient quantity of vitriolic æther. The solution is accomplished at the end of a few days.

In the other, he gives the detail of some experiments undertaken to determine, whether the barytes and strontian be different earths; but in these he seems to have done nothing else than copying the ingenious experiments of Dr. Hope, and profiting by the hints thrown out by him. He concludes that the strontian is a peculiar earth.

M. Chaptal, in a subsequent memoir, examines the two processes by which verdegris is made at Montpellier and at Grenoble. At the former place, the process consists in fermenting the husks of grapes after the last squeezing, and laying strata of the fermented matter over plates of copper; but at Grenoble, and in the neighbourhood, all that is done is to besprinkle with distilled vinegar plates of copper arranged for the purpose in large wooden vessels.

The verdegris of Montpellier is of a greasy pasty consistence; it loses one half of its weight by drying, and is little soluble in water. That of Grenoble is drier, and of a more lively bluish green colour; its fracture resembles that of crystal, and it is more soluble in water. The former is sold at a cheaper rate, and is successfully employed in painting; the latter is preferred for dying, as affording a greater degree of brightness in the colours, and a less quantity of it being required to form mordents. Chaptal wished to understand the reason of these differences in the quality of these two articles.

He found by analysis, that the verdegris of Montpellier is a mixture of the oxyd of copper, of vegetable extractive mat-

ter, and the acetite of copper. That of Grenoble contains scarcely any thing else than the acetite of copper.

M. Sabatier, in a long memoir, has detailed several cases of locked jaw, in consequence of wounds, &c. All of them, excepting two, proved fatal. He concludes his paper with the following reflections:

1. The locked jaw is very much analogous to the tetanus of the Greeks, and to the disease which prevails in the southern countries of America, as described by several authors. In fact, the two diseases exhibit nearly the same symptoms, prove almost equally fatal in their event, and yield to the same remedies in the very small number of cases that are susceptible of cure. But, he adds, there is one very remarkable difference between them: Tetanus is often accompanied by a spasmodic affection of the masseter and temporal muscles, similar to that which occasions the locked jaw; but most frequently that symptom does not take place till after almost all the other muscles have been contracted, and the whole body has grown stiff and inflexible: whereas it constitutes the chief symptom in the locked jaw, insomuch that many die without having had any other complaint. Besides, the two diseases being the effect, the one of internal and obscure causes, and the other of an excitement of the nerves, in consequence of a wound more or less considerable, may be regarded as different, although belonging to one genus, and resembling each other very nearly.

2. The locked jaw appears under different forms. Most generally it is an exceedingly acute disease, and terminates in death, without having occasioned apparently any remarkable change in the animal economy. Those attacked by it have scarcely any difficulty of breathing, and their pulse deviates very little from the natural state. No other muscles are convulsed than those designed to bring together the jaws, and the intellectual faculties are scarcely at all impaired; nevertheless, patients often do not survive thirty or thirty-six hours,

and

and many are cut off within twenty-four. In other cases the disease, more alarming in appearance, from the convulsive motions of every kind which attend it, continues for a longer time; and, notwithstanding its excessive danger, affords room to indulge the hope of cure. And there are some other cases, though, no doubt, few in number, in which the progress of the disease is very slow, and in which there is a probability of a cure being accomplished by means merely of general remedies prudently prescribed.

3. The locked jaw supervenes to all kinds of wounds, to the operations of amputation, castration, and hernia, to the injuries arising from dislocation and fracture, and even to simple contusion. The disease appears at an early period in some cases, and at a late one in others; some being attacked by it on the fourth or sixth day; others, and these in greater number, on the fourteenth; and others on the eighteenth, twentieth, twenty-fifth, and even the thirtieth day after receiving their wounds. The danger, in these cases, does not seem to be lessened in consequence of the distance of time that may have elapsed between the original injury and the occurrence of this alarming symptom.

4. It appears to be impossible to prevent the locked jaw by any mode of treatment.

Lastly, of all the remedies employed in such cases, opium is alone to be depended upon. The quantity must be determined, M. Sabatier insinuates, by the violence of the symptoms. In one case, Citizen Billard prescribed thirty-six grains of opium within twenty-four hours. The application of the actual cautery to the wounded surface has been recommended by a celebrated physician; but he observes, there must be cases where it is impossible to determine the seat of the disease.

In the next memoir which falls under our notice, M. Tenon gives an account of the successful application of the trepan in a case of carious thigh-bone. The patient continued a year

under the treatment, and at the end of that time obtained a complete cure.

The same author, in a subsequent paper, offers some remarks on the growth and decrease of the human cranium. He found that it weighs at birth thirty-nine grammes and seventy-eight centigrammes; at six years of age, two hundred and forty-four grammes and ninety-one centigrammes; in the adult, six hundred and twenty-four grammes and twenty-two centigrammes; and in old age, three hundred and seventy-four grammes and two centigrammes. His observations upon the dimensions of the head at different periods of life must be extremely interesting to the anatomist, but are too minute to be followed in a sketch of this kind.

M. Desessartz, in the next memoir, points out the necessity and advantage of drawing only a small quantity of blood at a time in the inflammatory diseases of children who have large heads. He advises, that the lancet should be seldom employed in patients of a year, or a year and a half old, but that four or five leeches be applied. From this it must be apparent, that the essay is addressed to continental practitioners, as we believe it is never the practice in Great Britain to open a vein in children under two years of age, except from very peculiar circumstances indeed.

In the paper which next claims our attention, M. Chaptal relates some experiments on the juice of euphorbium and of other vegetables. The natural juice of euphorbium consists of one part of fibrous matter, or what Chaptal considers to be the carbon, and two parts of resin. These are rendered soluble in water, by means of the vegetable extractive matter which the plant affords. Oxygenous gas, heat, fixed alkalis, alcohol, and even meré rest, are sufficient to destroy the union, and to separate the fibrous part from the resinous. The former constitutes a precipitate, resembling, in many particulars, that which forms the caseous part of milk. This precipitate unites perfectly with oils, making a soapy matter of a soft

a soft consistence, that in a little time becomes of a yellow colour, and parts with some of the water which had appeared intimately blended with it, insomuch that small watery drops form on its surface. The expressed juice of euphorbium, containing both the fibrous and the extractive matter, forms no such combination with oils. Other vegetable substances afforded the same results, varying only with respect to the proportions of the precipitate, and the time in which it is obtained. Seeds contain a greater quantity of the precipitate than other parts of the plant.

These circumstances, he thinks, elucidate several phenomena of nutrition in vegetables, such as the manner in which the carbon is introduced into the system of the plant, the means by which it is transmitted through the different parts, and the means also by which it is deposited for the purpose of contributing towards nutrition.

In order to explain these operations, M. Chaptal observes, that the common charcoal, although mixed with earths, is incapable of nourishing vegetables, while, from the decomposition of plants, by which their carbonaceous matter is separated, vegetables derive their nutritious principles. This difference arises, in our author's opinion, from the carbon, in the latter case, always remaining dissolved in the oily, extractive, resinous, or alkaline principle, by which means the water serves as a vehicle for conveying it to every part of the system of the plant, as it has the power of dissolving or diluting these natural combinations. The carbon thus conveyed is separated from its combinations by the means already explained. This ingenious idea does not militate against another explanation that might be given, although not hinted at by Chaptal, that the charcoal of commerce is in fact an oxyd of carbon, an opinion which many circumstances have long rendered probable, and which the late discoveries of Morveau seem to have completely established.

In animals, our author concludes, nutrition is carried on by

by similar laws. In them, the fibrous matter, or carbon, is dissolved in the gelatinous albumen; and air, acids, and rest, are equally capable of precipitating it. The albumen itself, which forms a second nutritive substance in great abundance in the animal machine, concretes by the action of the air, according to the ingenious opinion of Fourcroy; and perhaps the air, which penetrates every part of the body, through various channels, is especially destined to precipitate and to consolidate the fibre and the albumen.

Two memoirs, by M. Daubenton,—one exhibiting the plan of the experiments which are conducting under his superintendance in the botanic garden, on sheep and other domestic animals, and the other upon the generic characters employed in natural history,—contain nothing that need detain us.

M. Desessartz, in a very long dissertation, has detailed his observations on the small-pox, and their complication with scarlet fever and the miliary eruption. The principal facts that seem worthy of notice regard the latter symptom. He invariably found, that, at whatever period of the small-pox the miliary eruption supervened, the progress of the original disease was completely suspended, until the miliaria scaled off, and then it went on as usual; a strong proof, if any were required, that the miliary eruption is upon some occasions an idiopathic disease.

The two memoirs next in order relate to the minutiæ of botany, and could not be rendered generally intelligible without the assistance of the plates which accompany them in the original. We content ourselves, therefore, with copying their titles: the first is by Desfontaines, on the organization of monocotyledons, or plants with a single seminal leaf: the other, by Ventinat, is a dissertation on the genus phallus.

A curious case is related by Halle in the next memoir. A young woman gradually became emaciated, without any diminution of appetite, and without any specific complaint.

At the age of twenty-one the catamenia ceased: from that time the emaciation went on progressively: she had no fever, no cough, no sweatings, no œdematous swellings whatever; and the discharges by stool and urine were quite natural. She died at the age of twenty-five, having been confined to bed only fifteen hours, and in these were included the usual hours of rest. The only two peculiarities discovered on dissection were the almost total want of fat, and the obliteration in a great measure of the lymphatic system. The lacteals were invisible, all the glands were remarkably small; the inguinal glands, in particular, were quite shrunk, and the vessels leading to them were almost impervious. Halle therefore concludes, that this case affords an example of atrophy, independent of any organic affection, except what resulted from the successive obliteration of the lymphatic system. We must observe, however, that as no attempt was made to inject the lymphatics, by fixing a pipe into the thoracic duct, there might be some ambiguity in the case.

Two essays on a peculiar method of studying anatomy, by Tenon, conclude this volume. The discrepancies that are perceived in the anatomical details of different authors, Tenon imputes to inattention to a certain fact, that the various parts of the body are continually undergoing changes, so that a description of any particular organ, which may apply exactly to one period of life, shall not correspond with what takes place at an earlier or later period. He proposes, therefore, in describing the anatomy of the several parts of the body, that a regular view of the various states through which they pass, from birth to extreme old age, be exhibited. As an example of this new method, Tenon has undertaken the anatomy of the teeth, which he considers as affording the fairest evidence of its advantages, since no anatomical subject has been more minutely studied; and hence it might seem, that little remained to be added to our knowledge of it. If, therefore, he says, he can shew, that the new method is useful in this respect,

spect, it must be admitted, that very high advantages would accrue from adopting it in the examination of other anatomical subjects, which have not been so frequently investigated. In these essays he has confined himself to the anatomy of the teeth of the horse; but the discoveries he claims as having made cannot be understood without consulting the plates.

---

ART. X. *Reflections on the Cow-pox, illustrated by Cases to prove it an absolute Security against the Small-pox.* Addressed to the Public, in a Letter to Dr. Jenner, from WILLIAM FERMOR, Esq. Octavo. 47 pages. ROBSON, London. 1800. Price 1*s.* 6*d.*

ALTHOUGH but little *new* information is contained in the pamphlet before us, the author has brought forward a respectable body of evidence, tending to confirm the observations of Jenner and Woodville. As Mr. Fermor is not a medical man, he took the precaution of subjecting his experiments and cases to the inspection of many of the most skilful professional gentlemen in Oxford and its vicinity. The vaccine matter he employed was originally derived from the Rev. Mr. Jenner, of Berkley. The total number of his cow-pock patients, from eleven days old to seventy-five years, amounted to three hundred and twenty-six; of which number, one hundred and seventy-three were afterwards inoculated with the small-pox, without taking the infection. In only two instances did any vaccine eruptions appear, except on the inoculated part; a single pustule on the forehead of one, and likewise one on the arm of another. "No sickness of any consequence ensued, nor any loss of time from ordinary avocations. The disorder was not communicated by contagion to any who refused to submit to its inoculation. The symptoms which generally occurred, were, a pain in the axilla, or in the head, sometimes in both; but no

no nausea, or one may say, any other constitutional illness. Indeed, some of them were entirely free from all the above complaints. An efflorescence generally appeared about the punctured part, and sometimes extended, though without pain, down the fore-arm, and up to the shoulder. But this happened very seldom. No medicine of any sort was administered, nor had any of them any inflammation on their arms that could create uneasiness."

Mr. Fermor very strongly recommends practitioners "to be well assured by ocular evidence, that their inoculated patients have received the cow-pox infection. As the fluid is of a much milder nature than the variolous, it will often be necessary to insert it more than once. I have frequently seen it applied three or four times, and in some habits even then without effect. I once saw it inserted six times, but no infection was produced. If particular attention be not paid to this circumstance, patients may lull themselves into an ill-grounded security of being for ever proof against the small-pox contagion, whereas in reality they have never had the cow-pox."

The author relates, that a farmer in his neighbourhood, who pretended to be an inoculator for the cow-pox, inoculated two of Mr. Jenner's patients, who had never received the cow-pox from him, and who were returning to be inoculated a second time. He likewise failed in his attempt to give them the cow-pox. In consequence, they afterwards received the variolous infection, which was communicated to them inadvertently, on their assertions of having had the disorder. Fortunately for the inhabitants of the village, a considerable part of them had been inoculated by Mr. Jenner, with the vaccine complaint. They consequently resisted the variolous contagion. Five children, belonging to one of these men, had previously received the cow-pox infection, and had likewise been inoculated with variolous matter, without effect. They lived under the same roof with the father during the whole time of his being under the influence of the small-pox,

and one slept in the same bed with him. They were at the same time again inoculated from him with variolous matter, but still remained proof against all contagion.

" On account of the difficulty of communicating the vaccine infection, which frequently requires to be inserted, as is said above, more than once, it is much to be wished that the practice were to be confined to professional men only. Such as have other avocations and employments, which require their particular attention, cannot possibly give up so much of their time as seems to be required to this very important business. Some, to my knowledge, in different parts of the kingdom, have received the variolous infection, after having been ineffectually inoculated with the cow-pox, and not seen a second time by those who inoculated them. Whereas the medical practitioner, who has no other employment, would, in the course of his rounds, call upon such, to inspect their arms, and examine the progress of their disorder, and again repeat the inoculation, if necessary.

" I am likewise well aware, that there are many respectable medical names affixed to cases wherein it seemed to appear, that individuals had received the variolous contagion after having had the vaccine disorder. That they had undergone the spurious sort, I grant; as it is well known to be no safeguard against the former complaint.

" Being well convinced that every liberal mind will be ready to acknowledge an error they may have fallen into, from not having been aware, at the time of publishing their opinions, that there was a genuine and a spurious sort, I cannot recommend to them a better example for their imitation than that of our great and candid Sydenham; who having by experience found that he had discovered a better method of treating the gout, with which he himself was much afflicted, than the one he had formerly practised, retracts his first opinion, in the following remarkable words from Virgil:

" Nec

" ——Nec si miserum fortuna sinonem
Finxit, vanum etiam mendacemque improba finget.

" It is unnecessary for me to say any more on this truly interesting subject. I leave the impartial reader to his natural reflections; but I think, in consequence of the above premises, I may venture to say, that he will now be of opinion that the genuine cow-pox is mild in its effects, congenial with every situation and employment of life, totally void of contagion, and a certain preservative against the baneful influence of the small-pox; that no constitutional or family complaint can interfere with its effects, or prevent its adoption."

Several cases are detailed, which the most prejudiced or sceptical reader must allow to prove, or at least to render it highly probable, that the genuine cow-pox is a preventive of the small-pox, " though inserted at very distant periods." The following fact tends to confirm the opinion of the variolous infection being a security against that of the cow-pox:

" Mr. Hill, a considerable farmer, of North Aston, in the county of Oxford, had the cow-pox in his farm in the year 1796. Having a large dairy, many of his cows were infected with it. The disorder was communicated universally to the servants who were employed in milking. Mr. Hill's three sons constantly milked with the rest during the time, but neither of them were in any shape affected with it. They had all three been previously inoculated with the small-pox."

---

ART. XI. *An Address to the Public on the Advantages of Vaccine Inoculation: with the Objections to it refuted.* By HENRY JENNER, Surgeon, F. L. S. &c. Quarto. 19 pages. CADELL and DAVIES, London. Price 1*s.* 6*d.*

MR. Jenner commences this Address by giving a comparative statement of the peculiarities subsisting between the small-pox and cow-pox. The former, he observes, very fre-

quently calls latent diseases into action; but the latter "is a pure disease," which excites no disposition to other complaints. The former is communicable by effluvia, but this never happens in the cow-pox. The variolous disease is dangerous to children while cutting their teeth; but no such objection lies against the vaccine disorder. Delicate infants frequently have alarming fits in sickening with the small-pox, and suffer materially in their future health; whereas the constitutions of children have been improved by the new inoculation. The small-pox is often fatal; no instance of fatality, however, has yet happened from the true vaccine disease. The former is attended with disgusting eruptions, which often disfigure the face; but the author says he has never observed any pustules in the cow-pox. In the small-pox, medicines are necessary, and a degree of anxiety must be felt for the safety of patients; but no remedies and attendance are required in the cow-pox, nor is this disorder accompanied with the least danger.

In conjunction with Dr. Jenner, his uncle, the author tells us he has had a very extensive share of practice in this disease; and feels himself, therefore, inclined to answer the most popular objections which have been urged against the cow-pox. He first replies to the supposition that, as it is a *bestial humour*, it may introduce an *unnatural* disease into the constitution.

"If this very weak and futile objection were worthy of reply, we might observe, that the cow is of all others the most healthy and the most cleanly of our domestic animals, and might also remark, that no females are so healthy as our dairy-maids, whose morning and evening hours are spent amongst the cows; and we should not forget that the most eminent physicians recommend invalids to avail themselves of the salubrious effects of the breath of the heifer. How void of foundation then must be the objection to the insertion of an atom of matter taken from the teat of the cow, once in the

life

life only, when every person is in the daily habit of introducing into his stomach various parts of the same animal. The human stomach revolts not at beef, butter, cheese, and cream; yet every one acquainted with the animal economy, must know that these aliments are quickly mingled with the constitution.

"It may not be irrelevant to remark, that cheese, which constitutes so considerable a part of human food, may very frequently contain a sufficient quantity of vaccine matter for the inoculation of thousands.

"Nor may it, perhaps, be too hypothetical to suppose, that the cow-pox may possibly be the small-pox in its original unadulterated state, before it became contaminated by passing through the impure and scrofulous habits of human constitutions. Is not this idea in some measure supported by the fact, that cow-pox never excites scrofula, for the simple reason, that heifers have never this disease? And may it not appear after small-pox, as the matter may have passed through diseased habits?

"Another grand objection (which indeed is the only one that strikes at the foundation of our theory) is, that persons are liable to be affected with small-pox after having been inoculated with the cow-pox.

"A very extensive practice, and an equally extensive communication of the experience of medical friends of the first reputation, would almost warrant a short, abrupt answer to this question; an answer conveyed in terms unaccommodated to the feelings of the present age. After this objection, which has been refuted as often as it has been urged, a laconic reply, conveyed in no polite language, would by no means be improper, as it would harmonize with the general mode of such objections; and by all laws the answer ought to be of the colour of the question. But what is not owing to cavilling individuals is a just debt due to a candid and judicious public.

"Every

"Every case that has been brought forward to undermine the theory we defend, we can prove to a demonstration was not one of the genuine kind. There are *three* diseases which have indiscriminately been termed cow-pox, only *one* of which is the real preventive of small-pox. In the spring season particularly, cows are frequently sent to market for sale: the farmer omits to milk them in the morning, previous to their setting out, that their udders may appear full, and the animals on that account become more valuable. The frequent consequence is, that inflammation ensues, which terminates in eruptions on the teats and udder, and affects the milker with a loathsome disease on the hands, arms, and shoulders. The forehead sometimes does not escape, from the circumstance of the servant's leaning against the udder in milking. This disease may affect the same person several times, but it will never prove a preventive for small-pox. A case of this kind occurs in the city of Bristol: a Mr. Jacobs, Attorney at Law, was extensively affected *twice* with this disease, (which, from his total ignorance of *real* cow-pox, he has called by that name,) but it did not prevent his being afflicted with a subsequent severe small-pox."

After making a few observations on this case, the author adds, that it "very clearly appears to be one of those which Dr. Jenner has defined to be a spurious cow-pox; that is, one not capable of producing any specific change in the constitution, but leaving it as susceptible of the small-pox as after any other common eruption.

"I hope, therefore, it will not be expected I should come forward to prove again to the public, that every such case of eruptive disorder, improperly called cow-pox, (because it arises from a disease on the cow's udder, which has been, and always may be, succeeded by small-pox,) is actually of the spurious kind, and has no more to do with small-pox than the hooping-cough or measles. But it is certainly the duty of those persons who bring forward such spurious cases for

the

the true and genuine cow-pox, fully to investigate and give a minute description of every particular symptom with which such disease is attended, to medical practitioners conversant with the disorders in question, and suffer them first to determine whether it be the true or the spurious kind, before they attempt to prejudice the public mind by giving an absolute determination of their own.

"Every case of my own inoculation for cow-pox, and of every genuine natural case I shall have mentioned to be such, I do here assert, and will answer for the result of it, that it shall withstand every effort that can be devised, either by inoculation or otherwise, to introduce the contagion or infection of the small-pox into the system, at all ages and at any distant period from their having had the cow-pox. But as the spurious disease frequently shews an exact similarity in many of its appearances to the true species, it will require the discrimination of the exercised practitioner to distinguish one disease from the other, so that I can only ensure my own cases, or those cases inoculated with the vaccine matter immediately from myself; and I beg leave to ask the parents and relatives of those patients inoculated by me, whether every thing I have herein stated respecting the cow-pox, as far as they are capable of judging, be not strictly true?

"The other sort of spurious vaccine disease is occasioned by flies of a particular species biting or stinging the teats of the heifer; but this has no effect in preventing the attack of small-pox.

"The third, or genuine cow-pox, affects the teats of the animal generally in the spring. It is conveyed by the milker from cow to cow, until the whole stock becomes infected, together with the milkers themselves: a wound or two appears on the hands, which swell considerably; the glands under the arms become enlarged, and the constitution is sensibly affected, unless the patient has previously gone through the small-pox, in which case it proves very mild."

The

The author adduces two cases of the genuine cow-pox having been taken casually about thirty years ago, and another "where nearly *sixty* years have elapsed since the person had the vaccine disease;" but neither of these patients could be now infected with the small-pox, although frequently exposed to its influence. He concludes by observing, that if the illiberality of his opponents be overlooked by the public, their ignorance ought to be noticed; "for I must be bold enough to affirm, that not one case of *genuine* cow-pox has ever come under their inspection."

---

ART. XII. *Some Observations on Vaccination, or the inoculated Cow-pox.* By RICHARD DUNNING, Surgeon, Plymouth Dock, and Member of the Medical Society of that Town and Plymouth. Octavo. 122 pages. CADELL and DAVIES, London. 1800. Price 2*s*. 6*d*.

THE author is a warm enthusiast for "vaccination," as he calls inoculating with cow-pox matter (by a term not very appropriate,) and censures with no small degree of asperity those who are less sanguine, or who have not taken so much pains, as he intimates he has done, to ascertain its merits; not considering that those who doubt, and deliberately weigh before they decide, are more likely to form a right and correct judgment than those who too precipitately determine. We do not say this to extinguish, but to moderate a little the zeal of the author; which seems, if we may trust his own expressions, to have flamed out with so much vehemence as to have made him a troublesome neighbour to his brethren, whose motives for not assenting to his opinions are most uncharitably attributed to the basest propensities.

"The hydra of opposition in this neighbourhood, I have infinite satisfaction in saying, has within these few weeks been nearly driven off the field, and is become at present an almost

headless corpse. It must be allowed that she has maintained the combat with an obstinacy and policy which, in a better cause, would have been as creditable as it is now unworthy. She retires, indeed, with a struggling reluctance, and, even in her retreat, has broken new ground, in hopes perhaps to gain time and breathe a little, or as a forlorn *dernier resort*, and intrenched herself seemingly with the most consummate art, behind the most extraordinary, but I will venture to assert equally as untenable a hold as any that has hitherto been resorted to—the protection against the small-pox, they say, is to be of a definite duration only, of some five, six, or seven years. —While they were about it, why not have said, with equal ingenuity and acumen, that the small-pox will certainly break out some hundred years hence in the graves of all those who have been subjects of the cow-pox?"

The evidence that the cow-pox guarantees the constitution from receiving the infection of the small-pox, is certainly very strong, but not yet so complete as totally to preclude all reasonable doubt; or so as to subject those to censure, who require a longer course of experience, before they are perfectly satisfied. The author "feels no hesitation in saying, that the small-pox will be expelled this island long before the expiration of these five, six, or seven years of quarantine, and be mentioned only as a disease that has been;" a consummation which, we think, however much to be wished, is hardly to be expected.

He inoculated a child, of a scrophulous habit, with cow-pox matter; the child took the disease, which proved of a mild and favourable kind, and from that time began to recover, and in a little time more, was completely cured of its scrophulous affections. Mr. Dunning hence thinks it may be worth while to try vaccination as a remedy in consumption; not, as he gravely tells us, discontinuing all other medicines and regimen, while carrying it on, but using it as an auxiliary. He intimates, that as persons are capable

of being repeatedly infected by the cow-pox, consumptive patients might be inoculated from time to time, until the cure should be completed. The author then does not seem to know that the patrons of the cow-pox do not generally admit that persons are capable of being repeatedly infected by that disease. He entirely disapproves of the custom of giving strong purges, either during the preparation for inoculation with the small-pox, or after the patient has passed through the disease; in which we heartily join him: the practice, however, is not much followed at this period.

"It is now time," he goes on, "to advert to the subject of vaccination: but truly the whole affair of that absorption and passage of the vaccine aura through the human body, effecting that inexplicable, immaterial, and indelible fiat or orgasm, which assures to it complete invulnerability to every possible future attack of small-pox——".

This is surely too bombastic and unintelligible to be admitted in a medical work, or indeed in any other. We are not often disposed to censure the manner, where the matter is useful and important; but to write intelligibly cannot be difficult, and is always necessary.

The author joins in opinion with Dr. Jenner, that the cow-pox, when genuine and uncontaminated, is never attended with a general crop of pustules. "It is, however," he says, "very obvious to remark, that in almost, I believe in every instance, where anomalous and equivocal, or pustules in all their appearances and concomitant circumstances exactly resembling the small-pox have occurred, these have happened in situations either where the small-pox had lately been, or were at the time actually present, or where variolous miasmata could hardly fail to exist. The former may, therefore, with the greatest probability, be considered as a sort of tertian quid,"—*tertium* quid we suppose the author would say. Here again is a jumble of words that would be scarcely intelligible but for the concluding observations, which shew what Mr. Dunning means.

As

As this subject is now under discussion, the following letter from Mr. D. Little, an intelligent Surgeon at Plymouth Dock, to our author, is here given entire, as communicating useful information towards deciding the disputed point.

"*Plymouth Dock, 22d May* 1800.

"As the vaccine inoculation, here as well as elsewhere, has met with opposition, from what I believe misrepresentations or mistaken cases of it, and as your inquiries have been lately much directed towards it, I beg to communicate to you two cases which occurred the other day in my practice: they appear to me of importance in as far as they tend to detect a mixture of other diseases with the vaccine. On the 29th of April I inoculated with vaccine matter (with a lancet which had never been used but for that purpose) two children of —— Darracott, the youngest about five weeks old, the eldest about five years. The infection was communicated to the youngest on the first insertion of the matter; the eldest did not then receive it: the former went through the disease in the usual mild manner. I again inoculated the eldest on the 9th of May, from the arm of the youngest, and then infected him. On the 19th of May the boy was brought to my house with an account that he was feverish, and had been so the day before, and that eruptions were appearing all over his body. The pustule on the arm had arrived at the height of inflammation, and maintained the specific character of the vaccine inoculation. I at first viewed the eruptions with surprise, as they were different from any thing I had met with in the vaccine inoculation; they were distinct, vesicular, and numerous, with slight inflammation at the base of each, and corresponded in some measure with the pustule on the arm. From this novel appearance, I was led to make further inquiry, and found that the youngest child, who had passed the vaccine disease about ten days, had similar eruptions with the elder, which had appeared within the last two days, and upon my calling at the house, found the infant with the chicken-

pox so distinctly marked as not to be mistaken by the most superficial observance. This case affords some observations, which I think important: had it been a solitary one, great doubts would have arisen of what nature the eruptions were, and would perhaps have been considered as vaccine eruptions. But the case of the youngest child places it beyond the shadow of a doubt on my mind. It may be objected by some, that two diseased actions are not known to exist at the same time. This is true in general, I believe, but not always; and though the two diseases here appear to have gone on together, I can readily conceive why they should: the genuine vaccine disease, in as far as pustules are concerned, is, I am persuaded, confined to the place of insertion of the matter, producing specific fever in a given time. The chicken-pox is known to be an eruptive disease, accompanied also with slight fever, and in the present instance, the vaccine fever supervening produced the excitement on the skin, accompanied with the vesicular pustules of the chicken-pox. From the observations in my practice of vaccine inoculation, amounting to more than fifty cases, I believe the genuine cow-pox never produces pustules on the body; pimples, where a previous disposition on the skin already exists, I have often seen, but they never suppurate; and I strongly suspect that those cases which have been given to the world as cases of vaccine eruptions, have been mixt cases of some other eruptive diseases not clearly discriminated. I am willing to believe and hope, that when the prejudices which now exist are removed, the vaccine inoculation will be universal. I am satisfied, that in those cases where the inoculation for the small-pox would be hazardous, and improper, on account of constitutional disease, the vaccine may be substituted with safety, often with advantage, by inducing a change in the system, tending to improve the general health. If my time would allow me, I could give you two strong instances to that effect; every additional case of vaccine inoculation more strongly impresses on my mind its

inestimable

inestimable value; and the more I view it, the stronger conviction is obtained, that in its pure uncontaminated form it cannot be considered as an eruptive disease. Should I at any future time have reason to change that opinion, I shall not hesitate to communicate it to you.

"I am, with respect,

"Your friend and humble servant,

"D. LITTLE.

"*P. S.* Having drawn up the preceding remarks in great haste, permit me to correct an error which I have fallen into, in respect to the time of the appearance of the eruptions on the youngest child. They did not appear until the day following the appearance of those of the eldest."

The author next gives a very short account of the effect of vaccination, or inoculating with cow-pox matter; and then a long dissertation, or rhapsody, on the cause or origin of the cow-pox and other eruptive diseases: the former we pass over as containing nothing new, the latter as totally devoid of meaning.

---

ART. XIII. *Observations on the Cow-pox.* By WILLIAM WOODVILLE, M. D. Physician to the Small-pox and Inoculation Hospitals. Octavo. 43 pages. PHILIPS, London. 1800. Price 1*s.* 6*d.*

THE author expresses his concern at being under the necessity of making some strictures on certain observations by Dr. Jenner, (See our Fourteenth Number, page 120,) attempting to shew that the matter used by the former was contaminated with variolous or small-pox matter, and produced a hybrid disease; which charge, the author says he knows to be unfounded, and thought it his duty to refute.

That the matter was not variolated, the author endeavours to shew by a variety of evidence. He supplied Dr. Jenner,

Dr.

Dr. Marshall, and other gentlemen, with matter from his patients, who among them inoculated several hundred patients with it; all of whom had the disease in a mild way, and without producing pustules.

The cause of the frequent appearance of pustules on the patients inoculated by the author, was not the mixture of variolous with the cow-pox matter, but the variolated atmosphere of the hospital where they were inoculated.

"Although," the author says, "I differ in opinion from Dr. Jenner in not imputing the pustular eruptions, produced in the cases at the hospital, to any adulteration of the vaccine matter employed in the inoculations, yet I readily admit that they have been and still continue to be the effect of some adventitious cause, independent of the cow-pox.

"This will clearly appear from the following observations, which likewise tend to place the subject in a new light.

"I had not long practised the vaccine inoculation at the hospital before I was requested to extend it into private families in the metropolis, where I soon discovered that the cow-pox uniformly appeared in its mildest form, and was never attended with eruptions. I also supplied several medical gentlemen with the vaccine matter, which was used by them with the like result. Hence I began to suspect that there existed some peculiar cause which rendered the patients under the vaccine inoculation in the hospital more liable to pustules than others: and that this suspicion was well founded I have since, from daily experience, been fully convinced.

"At various times I procured the vaccine virus, as produced in different cows, and with it inoculated patients in the hospital; but the effects of all the matter I tried were perfectly similar: and pustules proved to be not less frequently the consequence of these trials than of those made with the matter formerly employed.

"The last matter of the vaccine poison which I introduced into the hospital was obtained from Dr. Jenner, and originally taken

taken from Clark's cow, before noticed: with this matter I inoculated at the hospital on the same day three patients, on one of whom about a hundred variolous-like pustules were produced. This instance, and numerous others of the like kind which I could adduce, decidedly prove, that where there can be no doubt entertained of the purity of the cow-pock matter, with which the patients in the hospital are inoculated, pustules will frequently be the consequence.

"On the other hand, I have to observe, from daily experience during the last twelve months, that among the great numbers of children residing in various parts of London, to whom I have transferred the cow-pock infection, no instance of pustules that maturated has occurred. Now as these different effects of the disease between the patients in, and those out of the hospital did not depend upon any difference or alteration of the matter with which the inoculations were performed, the only cause remaining to which the frequent occurrence of pustules on the former can be rationally referred is the variolated atmosphere of the hospital, which those patients were necessarily obliged to inspire during the progress of the cow-pox infection.

"During the very general and fatal prevalence of the small-pox at a village eight miles distant from London, more than a hundred persons were inoculated under my direction for the cow-pox, of whom one in five had eruptions; and as these furnish the only instances which I have experienced, out of the hospital, of the cow-pox producing the variolous-like pustules, I am disposed to attribute them to the adventitious co-operation of the variolous atmosphere, to which the patients were exposed. In what way the variolous miasms act in thus modifying the cow-pox, or why they co-operate in some and not in all cases of vaccine infection, I shall not even venture a conjecture: the causes probably will continue as inexplicable as those constitutional peculiarities which produce all the varieties of small-pox."

Though Dr. J. may be mistaken in imputing the appearance of pustules, on the patients inoculated by Dr. Woodville, to the admixture of variolous with vaccine matter, yet it appears that the opinion he maintains is confirmed, *(viz.* that the cow-pox is not attended with varioliform pustules in its pure and unmixed state;) for it seems of very little importance, to the justness of this doctrine, whether the miasma or contagion of the small-pox was mixed with the matter with which the patients were inoculated, or whether it was communicated to them through the medium of the atmosphere.

Some valuable observations follow, still further establishing the superior safety of the vaccine disease over the small-pox. "In my private practice of inoculation for the cow-pox," the author says, "which has been very extensive, I have not met with one instance in which any pustules, resembling those of the small-pox, occurred. Hence the advantages of this inoculation over those of that of the variolous, are (as far as relates to the comparative severity of the disorder which they respectively excite) most satisfactorily evinced."

We have also additional evidence of its efficacy in guarding the constitution against the infection of the small-pox. "In order to shew," continues the Doctor, "that those who had undergone the cow-pox resisted the infection of the small-pox, I observed in my Reports, that upwards of four hundred of the patients who had received the former disease, were afterwards inoculated for the latter, which in no instance was produced; though more than a hundred of the patients had the vaccine disease so very slightly, that it neither produced any perceptible indisposition nor pustules. In addition to this, I can now say, that more than a thousand of those who had undergone the new inoculation have been put to the same test, and that the like result has been experienced.

"The above facts, added to a multiplicity of others of a similar import, published by several professional men, clearly demonstrate, that the cow-pox inoculation promises most

important

important benefits to society; and under this conviction I congratulate the public on the great progress it is making, by which the real value of the invention will soon become generally acknowledged, and duly appreciated."

The public are much indebted to the author of this little work, which, besides elucidating the point in dispute between him and Dr. Jenner, contains many new and useful observations; particularly as to the signs whereby it may be known whether the inoculation has taken effect, which, from some equivocal symptoms attending, is not always easy to determine. But the cow-pox is now disseminating so widely, in different parts of the globe, that its peculiarities cannot long be concealed from the public; especially as several intelligent practitioners have lately gone to the continent, for the purpose of watching and diffusing its salutary influence.

---

ART. XIV. *Notices sur la Vie literaire de Spallanzani.* Par J. LOURDES, Docteur en Medecine de l'Université de Montpellier. Chez MARADAN, Paris. 1800.

TO write the literary life of Spallanzani, that is, a history of the discoveries of one of the most able and ingenious inquirers into nature, is to place before the public, in an abridged form, a view of the wonders in which this physiologist has employed himself for a long series of years. If it be an advantage to find so many interesting objects brought together into a small space, they will receive a new light and an additional degree of utility, when they are retouched by an author who has lived many years with Spallanzani—who has followed his steps with attention, and examined the progress of his bold genius—who has often been seen combating with nature, and whose multifarious information in natural history and the animal economy places him in a situation to judge

of her works. Such is the idea we must entertain of M. Lourdes, after having read this life, and the learned notes which are annexed. Vide *L'Esp. des Journ.*

---

## MEDICAL CORRESPONDENCE.

Art. 1. *Description and Engraving of a new Instrument for dislodging the gaseous Fluids accumulated in different Parts of the human Body.* By D. THILOW, Physician at Erfurt.

THE stomach and bowels are frequently inflated with air, or a gaseous fluid, which it is extremely difficult to dislodge: carminatives are resorted to in vain; and when the distention is occasioned by spasmodic stricture of the cardia, pylorus, or valves of the colon, they are often injurious. During a fever, with which the author was afflicted, his bowels were violently inflated with wind, that no medicines he used were capable of dispersing. A clyster-pipe was introduced, and left in the rectum; and the air passed through it in sufficient quantity to afford relief, but was not entirely discharged. He was thence induced, he says, to attempt contriving a machine that might be more effectual, and be used with less inconvenience; the frequent introduction of an ordinary pipe occasioning, in delicate constitutions, considerable uneasiness in the part. After the author had completed his invention, he was informed that Professor Reich, of Erlangen, had a contrivance for the same purpose. Having waited a considerable time, in vain, for the publication of the Doctor's contrivance, he now ventures to lay his own before the public.

*Description of the Instrument.*

A common syringe, the author says, may serve for this purpose, with the only exception of having the piston furnished at its furthermost end with a circular opening. In this aperture, which runs longitudinally through the whole length of the piston, the stick (which is made either of wood or brass) is adapted,

adapted, by means of a screw: the stick must also have at its lower extremity a screw, and the inferior part of the syringe, or its bottom, must be so constructed, that it may be occasionally unfixed.

*Fig.* 1 exhibits the usual injecting syringe made of hard wood, or rather of a metallic substance. The upper part, or cap of this instrument, marked *a*, may be screwed on and off occasionally.

*e* is a hollow stick resembling a tube, which fits in the above-mentioned aperture of the piston. This stick, which may likewise serve for other purposes, is adapted at its head, or upper part, so as to admit the screw *f*.

*Fig.* 2 is a small tube, which fits to that part of the syringe which is freed from its covering marked *a*, as mentioned before.

*Fig.* 3 represents a straight tube, measuring about two or three inches in length, furnished with a stop-cock *b*. To this tube the smaller one, *Fig.* 2, may be joined by *c*, when necessary. The male screw *d* fits exactly to that part marked *a*.

Having placed properly the small tube, *Fig.* 2, at its place *c*, *Fig.* 3, the whole tube is then to be fixed to the syringe by *d*. The piston is next pushed down, and the tube, *Fig.* 2, is introduced into the rectum as usual.

This being done, the upper aperture of the stick must be closed by means of the screw *f*. The cock is to be opened, and the piston must be withdrawn gently. The cock *b* is then quickly turned, in order to close the tube; and the upper aperture of the stick must be opened, by turning the screw *f* so as to admit the air forced into the syringe to pass freely. The piston of the instrument is afterwards forced back again, the cock is to be opened, and the same manipulation observed as before, till all the superfluous air is by these means discharged out of the body.

*Fig.* 4 is a small tube, about three inches long, provided with a cock *i*. It has a female screw at its lower part, with

which it may be fixed to the syringe *a*. *k* has the form of a cupping-glass. *l* is a stilet fixed in its place.

*Fig.* 5 represents the stilet; *o* is its point, and *m* a screw by which it fits on the cap of the syringe *(Fig.* 6, *n.)*

The machine may be used efficaciously to discharge air from the cavity of the abdomen in tympanites. In that case, when *Fig.* 4 is fitted to the syringe at *a*, the cup is placed upon the part to be punctured: the stilet is then gently thrust forward till it pierces the abdomen, when it must be withdrawn by means of the piston.

This apparatus may be simplified by omitting the upper part, or head of the stick, in order to close the aperture by means of the thumb of the right hand, and permitting the air to escape by withdrawing the finger as soon as the piston is pushed out. If the syringe be made of brass, a stop-cock may be easily adapted at the upper part, by *e*, which will be still more convenient. Another contrivance is, not to pierce the stick and piston at all. For this purpose, a round hole must be made at the lower part of the syringe (nearly about *g.)* Into this hole, which ought to be of the size of a tobacco-pipe stem, a small tube, furnished with a stop-cock, is to be fastened, in order to transmit the air after the piston is withdrawn as usual. But the first contrivance is preferable to the latter; because the syringe may also be made use of for throwing up clysters, or for other purposes, when merely the opening of the piston and stick has been closed by means of a cork.

If, by this contrivance, the air contained in the lower part of the body is got rid of, clysters may be thrown up with ease and facility by means of the same instrument; and much may thus be done towards alleviating the patient. Dr. T. is confident, that if the air should even be confined in the upper part of the intestines towards the stomach, and exert its power upon the valves of the colon, the spasmodic pressure must become diminished by taking away the air below,

low, in the manner before described: for if the larger intestines be freed from air, the adjacent bowels will find but little resistance; it will overpower the valvula coli, and thus, he says, the pressure will become diminished.

As the use of this new syringe is therefore so obvious, the author thinks no surgeon ought to be without it. The famous self-acting injecting syringe of Kampf, for administering clysters, may also be easily adapted to this purpose. In order to do this, the tube, *Fig.* 3, is to be fitted: a notch is made on the right side of the little box to let the stop-cock *b* project a few inches. The stop-cock for this instrument ought to be so long as to project sufficiently. The piston and stick are to be the same as in the first contrivance. By these means, the person who is seated upon the machine may easily perform what an assistant is otherwise obliged to do.

---

Art. 2. *Case of the Bowl of a Tobacco-pipe lodged in the Oesophagus.* Communicated by Dr. BUCHAN, jun. of London.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

HAVING been lately in the neighbourhood of Tunbridge Wells, the following singular circumstance was mentioned to me by Mr. Richards, surgeon at Seal, in the county of Kent: I think it deserves to be recorded, as an instance of the powers of the living body to carry on its functions, notwithstanding the presence of apparently formidable impediments. Such cases tend to support the courage of the medical practitioner, and teach him not to despair of the salutary efforts of Nature, even in the worst cases.

French Stowe, a stout, healthy man, about 30 years of age, an inhabitant of Seal, on the 23d of December 1797, after having drunk a considerable quantity of liquor in the course of the day, was complaining much of heart-burn.

Some one present chanced to say, that chalk was a remedy for that complaint: "Then," adds he, "I shall soon be well," and immediately broke off the bowl of a tobacco-pipe with which he was smoking, and attempted to swallow it. The consequence was a violent fit of coughing, accompanied with difficulty of breathing. Mr. Richards saw him almost immediately, and introduced the probang, which passed with little difficulty to the stomach; but, on withdrawing it, it seemed to hitch against something about the commencement of the œsophagus. After repeated ineffectual attempts to remove this obstacle, he desisted. The patient, on trial, found himself able to swallow fluids, and even thin pudding, without difficulty; but any attempt to get down solids was attended with considerable pain. He chiefly complained of an almost perpetual irritation to cough, which was increased by lying down in a horizontal position. This symptom was alleviated by anodynes, and by sleeping in an upright posture in a chair.

After some time had elapsed, Mr. Richards brought his patient to town. The probang was passed by an eminent surgeon, who concluded, from the facility with which the instrument reached the stomach, either that the substance must have got completely into that viscus, and that the perpetual irritation to cough was the effect of sympathy, or that there had been some mistake in supposing it to have been swallowed. On the first supposition he recommended the use of acids, with the view of dissolving the calcareous earth in the stomach.

The patient returned to the country, and on the twenty-second day after the accident, being seized with a violent fit of coughing while eating some pudding, the bowl of the pipe was suddenly expelled along with the food. Mr. Richards saw it very soon afterwards, while it was still warm, and was half full of the food the man had been eating. Every sense of irritation immediately vanished, and he recovered his usual health.

It

It is probable, that as soon as this substance had been forced by the effort to swallow into the thin muscular bag forming the pharynx, that part had distended laterally, and thus formed a temporary bag or capsule for the reception of the extraneous body.

On examining the bowl of the pipe, the shank appeared to have been broken off quite close, so that not the smallest part projected. If we suppose it to have taken a particular position in the pharynx, with the curved side outwards, the flatted part, from whence the shank extended facing towards the cavity of the pharynx, it is easy to conceive how the probang may have passed it with little impediment, as well as how there came to be sufficient space for the descent of fluid aliment. It was probably retained pretty firmly in its situation by the contraction of the muscular fibres of the pharynx. The constant propensity to cough is easily accounted for, by the irritation arising from the pressure of this extraneous substance on the posterior part of the larynx, which the action of coughing was an effort of nature to expel; and at length, during, perhaps, some momentary relaxation of the spasmodic contraction of the muscles of the pharynx, succeeded.

Let me add, that I saw and conversed with the man to whom the accident happened, as well as his brother who accompanied him to town when he came for advice; both of whom corroborated all the circumstances now mentioned.

I am, Gentlemen, yours respectfully,

*Store Street, July* 4, 1800. A. P. Buchan.

---

Art. 3. *Observations on a supposed new Method of curing the Plague.* By an anonymous Correspondent.

*To the Editors of the London Medical Review and Magazine.*

Gentlemen,

In this age of experiment and discovery, the works of ancient writers seem to be too much neglected. If practitioners

of

of the present day were to pay more attention to those sources of knowledge, it is probable they might find something to their advantage. Many useful hints and observations, by which the present practice might be improved, lie scattered among the lumber of old and obsolete authors. From this neglect, several of our late writers have supposed they had made new discoveries, which, in fact, were made some centuries before they were in existence. The account given in the Number of your Magazine for April 1800, of a new method to cure and prevent the plague, is a striking proof of this assertion, as appears from the following extract from Sennertus de Curat. Febr. Pestil. &c. page 504.

"Antiqui non solum internis, sed et externis medicamentis ad sudores movendos utebantur: et celebris est inter alia inunctio Ætii, quæ paratur ex aquæ et *olei* communis āā ℥iij, nitri ʒij, quæ coquuntur usque ad aquæ *consumtionem*. Quo unguento *totum corpus* bis terve leni frictione incursitur."

Instead of common oils Sennertus says, they sometimes used oil of sweet or bitter almonds, of camomile, dill, elder, &c. The Egyptians, he adds, use similar inunctions, and with the same view, in pestilential fevers; which appears also from Prosper Alpinus (lib. iv. cap. 15. de Med. Ægypt.) to have been the practice among them in his time.

In page 542 of his chapter de Febr. Petechialibus, Sennertus again mentions the same remedy: "Alii adhibent inunctionem ex *hydroleo* et nitro, quæ cutem relaxandi, poros aperiendi, humores evocandi ac dissolvendi, simulque calorem febrilem contemporandi vim habent."

Is not the above-mentioned remedy deserving of a trial in the diseases for which it is recommended? Does the nitre pass into the system by the cuticular pores; and if it does, what effect may it be expected to produce? To solve this question by actual experiment seems of considerable importance to,

Gentlemen, your humble servant,

*June* 15, 1800. R. H.....

Art.

Art. 4. *A Communication respecting the anti-nephritic Qualities of the Peach-leaf.* By Dr. R. WHITE, of Bury St. Edmund's, Suffolk.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

THE hint expressed in your last Medical Magazine for further accounts of the use of peach-leaves in calculous complaints, encourages me to communicate the good effect attributed to a watery infusion of them, in the case of the late Rev. Richard Fayerman, of Oby in the county of Norfolk. This gentleman, for several years, had at times been suffering great torture in the kidnies, bladder, and urinary passages; and, after making trial of every supposed lithontriptic, his affliction had reduced him to the necessity of relinquishing his clerical offices. At length, from the warm recommendation of a friend and fellow-sufferer, he was persuaded to try peach-leaf tea.

From the favourable report of its use, I made inquiries on the subject, with respect to his mode of preparing and taking it, together with its effect; and was favoured with the following receipt, and remarks:

"Take about thirty or forty young and clear leaves nearly full grown, and put them into a tea-pot that will hold three or four moderate cupfulls; pour boiling water over them, sweeten it to your taste, and drink it after the manner of tea for breakfast, and take the same quantity in the afternoon daily." He farther writes, "I also drank a slight draught of it cold, at different times; and found no inconvenience from augmenting the quantity. The tea is not at all unpleasant, when made from the green leaf; but when dried for winter use is very unpalatable. I took it about two or three months without any visible effect; but, by perseverance, it brought away pieces nearly as large as a kidney-bean, attended with

exquisite torture; insomuch, that I was forced to have recourse to laudanum, and that in large quantities. I abstained from wine and all spirituous liquors whilst drinking the tea, but observed no restrictions with regard to diet. I found it necessary to keep the body regular with aperient pills; and when in extreme pain, found great relief from sitting over boiling water. The quantity of calculi I have since voided is about fifteen ounces; and, under Providence, I attribute my present happy state of health to the tea; and, afterwards, to the alcaline mephitic water;" in which latterly he placed full confidence, with continued success.

My knowledge, for many years, of his complaints, and the relief he was reported to have received from the infusion, induced me to recommend it to a few persons; from whom I have never heard the result.

I conceive that the foregoing instance, and the one lately communicated through your useful publication, are sufficient proofs, that no injury is likely to accrue from either the infusion or the decoction of peach-leaves. The following particular recipe, recommended by Matthiolus, and respectably noticed, may be considered as a proof also, that the essential part of the peach and other kernels, which may reasonably be supposed to possess more potent qualities than the leaves, have been safely administered, even after having undergone the process of distillation.

Matthiolus affirms that, "the water of fifty kernels of peaches, a hundred kernels of cherries, and a handful of elder flowers, macerated in three pints of malmsey, then buried in an earthen pot for ten days under ground, and afterwards distilled, expels stones from the kidnies in a surprising manner." Raii Hist. Plant.

Were the anti-nephritic qualities of the peach-leaf satisfactorily ascertained, there would happily be less reason to resort to the caustic alkali, or the pretended solvents, which, in the hands of the unskilful, too often prove injurious. Instances

of

of the good effects of the pulvis et infusum uvæ ursi I have known, assisted with the tepid bath, in cases where the passage has been choked up with mucus, concrete, and blood, for some length of time.

I remain, Gentlemen, yours respectfully,

*Bury St. Edmund's, June* 11, 1800. R. WHITE.

---

Art. 5. *A Case of uterine Hæmorrhage in advanced Pregnancy.* Communicated by Mr. WOOLLETT of Monmouth.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

THE following case of uterine hæmorrhage in advanced pregnancy, from a partial separation of the placenta, I am induced to send you, by your invitation to practitioners for original correspondence, &c. If, by inserting it in your Review, you think it may be an inducement to others to send cases more valuable, it will then be productive of good: should you believe otherwise, you will not insert it; and in that case, assure yourselves it will give me much satisfaction to see your Reviews filled with more interesting communications.

I am, Gentlemen, your very obedient servant,

*Monmouth, June* 20, 1800. J. S. WOOLLETT.

SEPT. 24, 1797, I was called to Mrs. A—, about three miles from Monmouth, between seven and eight months advanced in pregnancy of her third child, who, without any apparent cause, was on that day attacked with a very considerable hæmorrhage from the uterus. When I saw her, the hæmorrhage had ceased. On examination, I found the os tincæ contracted and rigid; no coagula. I bled her, and particularly recommended quiet, and urged her not, in any degree, to attend her domestic concerns.

Sept. 26, the flooding returned, the os uteri not so rigid, and a small coagulum protruding from it. I cannot form a judgment of the quantity of blood now lost, but the pulse was much lowered; and there were considerable marks of debility in the countenance and constitution.

Oct. 6, I was not called, but visited my patient, who had not experienced any return of hæmorrhage since 20th September; had kept herself quiet, and had not interfered with her family concerns. She was very low, and the pulse languid. I then apprized her husband (a respectable farmer) of the danger of her situation; and, having at that time engagements at a considerable distance from home, requested, if the loss of blood should again occur, and I should not be at Monmouth, to take another practitioner with him, as there probably might be a necessity for delivering Mrs. A— without waiting for the pains of labour.

Oct. 10, another very considerable discharge occurred; the os uteri was now less rigid, but not dilated. Although my patient was extremely debilitated, the pulse did not suffer so much from this return, as I was apprehensive it might; I did not therefore then conceive myself justified to interfere with nature.

Oct. 13, I was again called, and although nearly as much blood had been lost on that day, as on either of the preceding days, the hæmorrhage had entirely ceased when I saw her, and she had not experienced any pains. The circulation was now so languid, and the marks of debility so great, that I believed another return of flooding would be fatal to my patient. I now found the os tincæ so much relaxed, that I could introduce the extreme point of my finger, with which I dilated it, without difficulty, sufficiently to enable me to pass my hand into the uterus, and discover a weak pulsation in the funis. Having turned the child, and brought the feet into the pelvis, I waited to find if Nature would assist the delivery: she did so; but the pains were weak, and the contraction

traction of the uterus returned only at very considerable intervals. The child was born apparently dead, but by employing the means for restoring suspended animation it recovered. The mother remained languid some weeks, but with the assistance of the cortex, vitriolic acid, &c. and a proper regimen, completely recovered her health.

---

Art. 6. *An obstinate Case of Jaundice cured by the persevering Use of Mercury.* Communicated by Mr. KERRISON of Saville Row.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

AS a constant reader of the London Medical Review and Magazine, I confess myself frequently amused and instructed. Punctum tulistis, utilia miscendo dulcibus. If the following case and observations appear worthy of your acceptance, I request they may be inserted as early as the regular arrangement of your correspondence will permit.

I remain, with esteem, your obedient servant,

*Saville Row, July* 12, 1800. ROBERT KERRISON.

IN the various departments of science, reflection certainly prevents the commission of many errors, but experience alone teaches actual events, and confirms or refutes our expectations. In nothing is this more decidedly evident than in medicine: a specious theory can be easily founded, and supported by all the power and subtlety of logic; but the practical application may destroy its validity, and totally overturn the most promising speculations: this frequently happens, and almost every medical subject, from the difficulty of tracing causes by their effects, has been a matter of controversy. No philosopher can decide a point without demonstration; the generality of causes (in physic) do not admit of demonstration, therefore

they

they cannot be decided: hence the fallacy of drawing conclusions from such uncertain principles, or premises, and the consequent danger of applying them to practice, and what is worse, Quantò præstantior sit nomen auctoris, sententiam pravam proferentis, tantò plus periculi timendum; permulti, plurimive enim specie majùs quam ratione captantur.

The manner by which the blood becomes tinged with bile in icterus is involved in doubt and obscurity; it is, perhaps, generally believed to be absorbed from the gall-bladder in a state of turgescence or distention. Dr. Richter of Göttingen, whose estimable talents demand respect, does not assent to this, and mentions a case of confirmed jaundice, where the gall-bladder was extremely small and flaccid; hence, he says, the disease is occasioned by a stimulus, or irritation, acting on the hepatic system, which prevents the afflux, secretion, and excretion of the bilious fluids: here we see one opinion balanced against another. The proverb is true, "Felix, qui rerum potuit cognoscere causas." We may also justly say, Infelix qui causas patefacere non posset; res, seu effectus autem, haud impunè sublevare cogit. In conformity with this doctrine, he declares the greater number of cases to arise from irritation and spasm of the biliary ducts, for which he chiefly recommends sedatives and antispasmodics: he asserts, that real obstructions seldom occur, and when they do, an incurable disease is the consequence. The following is one of those cases in its worst degree, perfectly cured; and although little new be advanced in addition to the improved practice of this country, yet every case of real importance should be adduced in support of successful treatment, and in opposition to conjecture.

Mr. ——, near 60, rather corpulent, a regular liver, was seized, about Christmas 1798, with acute pain in the right hypochondrium, extending across towards the left, which continued for two hours; it became more obtuse, and in a few days general yellowness was diffused over the skin. On application

application to a surgeon he took opium and æther, rubbing the affected side with a liniment, and afterwards with a small quantity of mercurial ointment; internal medicines were continued with temporary advantage, or mitigation of symptoms, but the skin became more yellow, obstinate costiveness, clay-coloured fæces, and nausea, sometimes extreme pain in the region of the liver and on the shoulder. I then first saw him, some months after the commencement of the complaint.

Some small doses of calomel, with pil. e colocynth. comp. et sapone Venet. were prescribed; also a solution of kali tartarisat. with the tinct. et infus. gentianæ comp. This was continued a fortnight; a solution of kali acetatum was then substituted for the other, combined with bitters as before, and the quantity of the calomel increased. No evident advantage ensued; paroxysms of violent pain; intervals of ease; excrements like clay, not in the least coloured with bile; costiveness unless removed by the pills, which were increased in strength, and always procured stools, without pain or uneasiness; the composition as follows: Calom. gr xij, Pulv. gambogiæ ʒß, Pil. colocynth. cum aloë ʒij. Contunde, et divide in pilulas xxx: sumantur tres, quatuorve, horâ somni, bis terve in septimanâ. These would have been, perhaps, too powerful at first, but nothing less would now stimulate the intestines. Pills of sapo Venet. et tereb. e Chio were taken twice a day; and an emulsion of ol. amygd. with opium in paroxysmis dolorificis. No appearance of bile in the fæces; general diffusion of it over the body; the urine leaving a strong yellow stain on the linen; great weakness and emaciation. He now took Pulv. ipecac. gr iij, Calomel. gr j, Cons. cynosb. q. s. f. pilula ter quotidie sumenda: this was continued some days. Considerable nausea, slight vomiting. The ipecacuanha was increased to gr iv, then gr vj, with calomel. Sometimes vomiting; the mouth not tender; the warm bath had been used several times within the last fortnight. The symptoms continued as usual; the patient, in fact, no better.

A drachm

A drachm of ung. hydr. fort. was rubbed on the lower extremities every night; the warm bath was used twice or three times a week; the laxative pills with calomel every second or third night; an emollient regimen. The frictions were continued twenty-four times, without apparent advantage. The mouth not yet sore; the ointment was increased to ʒij omni nocte, the warm bath as before. In a few days the mouth became tender; very little increase in the secretion of saliva; three days afterwards the fæces contained a little bile, they had been hitherto uniformly destitute of it. The ointment (ʒij) was continued for ten days successively, but salivation was never completely excited; the stools at length assumed their natural appearance. Attentive examination had been made in expectation of finding calculi or biliary concretions: but nothing particular was observed. The frictions were now used three times, and the warm bath twice a week. Sixty drachms of ointment had been employed in the course of the complaint. The intestinal evacuations of a dark green colour, sufficiently copious, without the assistance of laxatives; the countenance and urine losing the yellow colour; the appetite returning. The frictions were now discontinued, and the warm bath only occasionally had recourse to; one or two of the cathartic pills were directed to be taken every third day. By these means the patient gradually recovered his health and strength. Several months have elapsed since the total removal of his complaint, without the smallest subsequent inconvenience: from a state of emaciation or ἀτροφία, he is now *en bon point*; possessing his former corporeal rotundity, appetite, and every enjoyment health can require.

Absit invidia rebus. Malevolence and detraction may be the delight of weak minds: "La vengeance et l'envie sont les plaisirs d'un esprit foible." No such satisfaction actuated the author when speaking of the celebrated Richter: his practice in icterus is chiefly antispasmodic. By spasm, or σπασμὸς, from σπάω, to draw, &c. in a medical sense, is, I be-



lieve,

lieve, understood an involuntary contraction. If, however, there had been only a spasm on the biliary ducts, or hepatic system, would it not have been removed by the various counter-irritations before the external application of mercury? Is it not more than probable that the biliary ducts were filled with inspissated bile, or unobserved concretion, which nothing less than dilatation by means of warm baths, and attenuation by the most potent influence of mercury, could remove? In justice to Richter we must observe, that he sometimes used deobstruents, or such medicines as possess a power of removing obstructions; but he lays a particular injunction not to push them too far, expressly declaring that biliary obstruction is a fatal disease. I can hardly hesitate in saying, that the above case would have been, by him, considered irremediable, and the patient consigned to death. The most powerful deobstruent, *mercury*, was alone capable of affording relief. The author does not arrogate to himself any thing new *, but the spirited and successful application of established remedies; which should, certainly, never be deserted for the attractive influence of novelty, unless fairly proved to be inadequate to fulfil the intentions of the prescriber: Un buon medico servési sempre de' remedi approvati, ma, spesso, un medicastro (come del cane dice il poetà nella favola) perde la realità pell' ombrà.

* Dr. Thomas Gibbons, of Hadleigh, Suffolk, in a late publication, (noticed in our Review for December 1799,) recommends calomel to be given in large doses, and continued so as to occasion a salivation, in cases of jaundice arising from biliary calculi.—EDITORS.

---

*THE following article contains an attested declaration in favour of the vaccine disease, as a substitute for the small-pox; a copy of which we promised in our last Number. Other names would have been subscribed, in addition to those which now appear, if it had been judged proper to delay the printing of so decisive and important a document.*

Art. 7. *Copy of a Testimonial in favour of the vaccine Inoculation *, signed by thirty-six Physicians and Surgeons in London.*

MANY unfounded reports having been circulated, which have a tendency to prejudice the mind of the public against the inoculation of the cow-pox; we, the undersigned physicians and surgeons, think it our duty to declare our opinion —that those persons who have had the cow-pox are perfectly secure from the infection of the small-pox, provided this infection has not been previously communicated.

We also declare, that the inoculated cow-pox is a much milder and safer disease than the inoculated small-pox.

| | |
|---|---|
| WILLIAM SAUNDERS, M.D. | SAMUEL CHILVER, |
| MATTHEW BAILLIE, M.D. | HENRY CLINE, |
| HENRY VAUGHAN, M.D. | ASTLEY COOPER, |
| MAXW. GARTHSHORE, M.D. | EDWARD FORD, |
| J. C. LETTSOM, M.D. | J. M. GOOD, |
| JAMES SIMS, M.D. | JAMES HORSFORD, |
| JOHN SIMS, M.D. | JOSEPH HURLOCK, |
| WILLIAM LISTER, M.D. | FRANCIS KNIGHT, |
| ROBERT WILLAN, M.D. | JAMES LEIGHTON, |
| C. STANGER, M.D. | JAMES MOORE, |
| ALEX. CRICHTON, M.D. | THOMAS PAYTHERUS, |
| THOMAS BRADLEY, M.D. | THOMAS POLE, |
| THOMAS DENMAN, M.D. | J. W. PHIPPS, |
| JOHN SQUIRE, M.D. | JOHN RING, |
| RICHARD CROFT, M.D. | JAMES SIMPSON, |
| R. J. THORNTON, M.D. | H. L. THOMAS, |
| JOHN ABERNETHY, | JONATHAN WATHEN, |
| WILLIAM BLAIR, | THOMAS WHATELY. |

* An institution has lately been founded at Paris, for the encouragement of the vaccine inoculation. A medical committee meets every day for that purpose, at the house of C. Colon; and we are informed that *Dr. Woodville* has just set off from the metropolis, in order to superintend these experiments.—EDITORS.

Art.

Art. 8. *Additional Observations on the varioliform Eruptions which have occurred in the Cow-pox; with some farther Remarks on the Origin of this Disease.* By Mr. RING, Member of the Royal College of Surgeons in London.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

ON a former occasion I expressed an opinion on the subject of cow-pox, which you have communicated to the world through the channel of your widely-diffused Magazine. Permit me to offer a few additional observations, which recent occurrences seem to demand.

If I had at that time entertained a doubt of the cases alluded to by Mr. Blair being variolous, that doubt would have been perfectly removed by subsequent events. Three instances have lately come within my knowledge, where the small-pox took place in consequence of the insertion of matter, received as cow-pock matter from the Small-pox Hospital.

About six weeks ago, Dr. Jenner asked me to meet, at his house, Dr. Aubert, who was sent to England by the National Institute of France, in order to learn the nature of vaccine inoculation, and has been attending the Small-pox Hospital a considerable time for that purpose.

Having then heard of two of the instances, where variolous, instead of vaccine matter, had been received from that hospital, I requested of Dr. Aubert to mention it to Dr. Woodville; which he promised to do, and politely thanked me for the information.

Two days ago, Mr. Simpson shewed me a severe case of small-pox, occasioned by a gentleman having inoculated the patient with what was sent from the Small-pox Hospital as cow-pock matter. In this case, not the least vestige of the cow-pox is to be seen.

Mr. Blair's paper on the subject of eruptions resembling

the small-pox, and my remarks on that paper, have already appeared in this work (See the last three Numbers of the London Medical Review;) and as the work is very generally read, and the subject new and interesting, particularly to those who are much engaged in the practice of inoculation, I concluded that my remarks would not escape the eye of Dr. Woodville.

In this respect, however, I have been disappointed; for in a pamphlet just published, entitled, "Observations on the Cow-pox," when speaking of the *Hospital matter*, he says,

"I have now, I presume, said enough to convince the reader, that Dr. Jenner's supposition is directly incompatible with established facts; and I hope, in future, he will do the Hospital matter the justice to speak of it as it deserves. It has been employed by many medical gentlemen, both in London and in the country; *and I do not know of one instance in which it has not fully answered the utmost expectations of the inoculator.*"

What was my surprise at reading this paragraph, when not only the medical and miscellaneous journals and magazines, but the weekly and daily prints, have noticed the circumstance of considerable pustulary eruptions, produced by matter obtained from the Small-pox Hospital! when the pamphlets written on the cow-pox allude to that circumstance! and when it has long been a common topic of conversation, both in private companies and at all the medical societies in London!

From the description of the proposed substitute for the small-pox given by Dr. Jenner, we were justified in expecting *a mild disease;* totally unlike that which, we since know, has been engendered at the Small-pox Hospital. In this respect, the disease produced by the matter obtained from that hospital has disappointed us; but, as a security against the small-pox, it might well answer our utmost expectations; for it is well known, that a person very seldom has the small-

pox

pox more than once. I have from the first been of opinion with Dr. Denman, that the Small-pox Hospital was the last place in the world, where the cow-pock inoculation should have been practised, unless we wished to bring it into disgrace.

When I applied to Dr. Pearson for vaccine matter, I understood he had taken it from the cow. At the time of inserting it, I was informed that what he brought with him came from Dr. Woodville, not being able to take sufficient from his own patients to supply the increasing demand.

Dr. Woodville admits, that the pustular eruptions produced in cases at the Small-pox Hospital, "have been, and still continue to be, the effect of some adventitious cause independent of the cow-pox." He affirms, that in his own practice out of the Hospital, as well as in the practice of several medical gentlemen, whom he had supplied with vaccine matter, the cow-pox uniformly appeared *in its mildest form*; and was *never attended with eruptions*. In this respect I cannot help entertaining a different opinion from Dr. W. having seen patients who had been inoculated by him, and others who had been inoculated with matter received from him, whose arms exhibited the vaccine pustule, while other parts of the body exhibited pustules resembling the small-pox.

It is not difficult to conceive, how patients inoculated at the Small-pox Hospital should catch the small-pox; it is rather difficult to imagine, how they should escape that infection. Dr. W. endeavours to refute the opinion, that the cow-pock matter used at the Hospital was contaminated with that of the small-pox; and tells us, that he had not long practised the vaccine inoculation in that place, before he began "to suspect that there existed some peculiar cause, which rendered the patients under the vaccine inoculation in the Hospital *more liable to pustules* than others." He adds, that he has since been fully convinced by daily experience, that this suspicion is well founded.

Rejecting

Rejecting the opinion that the matter was contaminated, he says, the only cause remaining, to which the frequent occurrence of pustules on patients inoculated in the Hospital can rationally be referred, "is the variolated atmosphere of the Hospital," which they were necessarily obliged to inspire during the progress of the cow-pox infection.

To confirm his opinion, he remarks, that in the practice of Mr. Evans of Ketley, more than half of the vaccine patients who were exposed to the variolous effluvia had pustules.

That a variolated atmosphere should produce a variolous eruption, is neither strange nor new. Dr. W. suspects, that in those places where the small-pox is epidemic, the cow-pox will be as liable to excite pustules as in the Hospital; and brings an instance to justify his suspicion. But, is it not more reasonable to ascribe the pustules which resemble the small-pox to the action of the variolous matter, in cases where that matter is known to exist, whether floating in the atmosphere or fixed on the point of a lancet, than to say, that where the *small-pox* prevails the *cow-pox* excites pustules?

That the vaccine inoculation will not always supersede the variolous infection, I can, if necessary, bring abundant proof; contrary to the idea entertained by Dr. W. when he published his former "Reports" on this subject. This is a sufficient reason why those who are inoculated for the *cow-pox* should not be *compelled*, nor even *suffered*, to breathe an atmosphere polluted by the *small-pox*.

No confinement, and of course no hospital, is necessary for that disease, if indeed it deserves the name of a disease; and were an hospital necessary for those who wish to shun the *small-pox*, the *Small-pox Hospital* is the last to which they should be sent.

The question under consideration is of no small importance. By the present mode of practice, those persons who are inoculated for the cow-pox are unnecessarily exposed to the small-pox; to which *one* of them has already fallen a victim. This,

it is true, was not immured in the Hospital, but inoculated there with the Hospital matter; and we shall endeavour in vain to stop the ravages of the small-pox, while it continues to issue in disguise from that polluted source.

From that centre it has lately radiated in three, and perhaps in many more, directions; but I hope, ere long, some remedy will be found for this grievance. That vaccine and variolous matter may be blended, and at one time produce the cow-pox, at another the small-pox, appears evident from the cases published by Mr. Kelson.

I have now inoculated above two hundred persons with vaccine matter, since I communicated to Dr. Pearson the case he has published, without producing pustules resembling the small-pox. This proves, that where pure vaccine matter is used, varioliform pustules are, at least, an unfrequent occurrence.

Permit me to offer a few remarks on the origin of the disease under consideration. It appears, that the Editors of this Review are not convinced of its being yet ascertained, from the evidence which I laid before them in their last Number. It will be sufficient for me to remark, that other proofs are not wanting, which will probably be published in due time by Dr. Jenner himself.

One circumstance I shall mention, which is this: Mr. Tanner, when foiled, as others had been, in attempting to produce the cow-pox by inoculating the teats of the cow with a lancet, had recourse to another expedient. He removed a scab, that had been formed on a sore, occasioned by some accident; and having rubbed on this broad surface some newly-secreted matter of grease, he succeeded in exciting the disease.

Whatever may be the origin of vaccine virus, it must give every friend to the interests of humanity peculiar pleasure to contemplate its end. The feeble opposition which the practice has met with, only serves to stimulate its advocates to new exertions, and to gain additional testimonies in its favour,

vour. It may now be considered as completely established; and I hope and trust it will be one of the first acts of the first Imperial Parliament of the British Isles to bestow an adequate reward, if it can bestow an adequate reward, on that distinguished character, to whom, under Divine Providence, we are indebted for this blessing.

I am, with great respect, Gentlemen,

Your most obedient servant,

*New Street, Hanover Square,* JOHN RING.

*July* 16, 1800.

*P. S.* Mr. Simpson informs me, that Mr. Jordan has two other patients, together with that which he shewed me, at this time labouring under the small-pox, occasioned by matter obtained at the Small-pox Hospital, as vaccine matter.

---

Art. 9. *An Inquiry whether or not Erysipelas be an infectious Disease.* By Mr. W. SIMMONS, Member of the Royal College of Surgeons in London, and senior Surgeon to the Manchester Infirmary.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

IT has lately become a subject of inquiry (See Transactions Medical and Chirurgical, vol. ii. of which an analysis is given in the last Number of the London Medical Review, page 394,) whether erysipelas be or be not a contagious disease; and the question is undoubtedly connected with important practical considerations. I have for some time entertained the former opinion, and, as the circumstances of the case which led me to adopt it may be interesting to others, I have taken the liberty to transmit them for insertion in your Magazine.

About three years ago, a man far advanced in life, in pursuing his employment as a common beggar, was ridden over by

by a gentleman on horseback going at full speed, by which two of his ribs, on the left side, were fractured, and a slight wound was inflicted on his head, on account of which he was admitted into the Manchester Infirmary, under my care. The cough, difficulty of breathing, and pain in his side, symptoms consequent to the fracture, were very distressing, and accompanied with so much general inflammation, as to render it necessary to bleed him repeatedly, and to enforce the other parts of the antiphlogistic course. But, when these symptoms were in a great measure subdued, and he was apparently in a convalescent state, a phlegmonous swelling appeared under the angle of the jaw, on the right side, which was followed by a correspondent one on the left, and from these two points an erysipelatous inflammation extended itself over the whole face and a part of the head Though he had been so copiously emptied immediately preceding this attack, and the means proper to avert it were now employed, the submaxillary swellings went on to suppuration, which was considerable; he then became delirious, and died. The wound on the head healed without any trouble.

I inspected the body after death, and found that the pleura opposite the fractures had not been pierced, nor had any extravasation taken place into the cavity of the chest, and every trace of inflammation had disappeared.

A rumour having gone abroad, that the poor man's death was occasioned by the accident, the coroner deemed it expedient to take an inquest on the body, and requested me to give evidence. At the time of the inspection, which the jury attended, I shewed them a man just recovering from an attack of erysipelas in the face, which then bore strong marks of the previous disease; and several other cases of it had occurred in the Infirmary but a short time before. This, the history of the disease, and the absence of any morbid appearance in the chest, induced the jury to acquiesce in my opinion, that the man did not die in consequence of the injury in his side, but

of the erysipelas, which was in no way connected with the accident, except his being exposed to the infection, by being brought into the Infirmary.

I was aware, that a wound on the head is often followed by an erysipelas in the face; in this instance, however, the spreading of the inflammation from below upwards, instead of from above downwards, appeared to me to mark a characteristic difference in the cause.

I have been rather prolix in noting the particulars, to shew when and by what steps I was led to believe, that erysipelas in the face is sometimes at least a contagious disease. The fact being once established, it obviously follows, that means of precaution should hereafter be employed to check its extension; and which, I apprehend, will be found in those recommended for arresting the progress of typhus and other infectious distempers.

*Manchester, July* 8, 1800. W. SIMMONS.

---

Art. 10. *An Explanation of some Circumstances relative to the Cæsarean Operation lately performed at Manchester.* By Mr. SIMMONS. *With Remarks by the* EDITORS.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

THE Number of your Magazine, containing your statement and remarks on the last case of Cæsarean operation performed here, came to hand only a few days ago, or I should have noticed them in my former communication.

You have thought proper to suppose, that I found it impossible to deliver the woman by the crotchet, and that I "left the disposal of her life to Him who gave it." Have the goodness to refer to the following passage in my Letter, which must have been before you, and then judge whether

it will bear the construction which you have put upon it: "At the request of Mr. Ogden I visited the poor woman, and from the information I gained upon an inquiry, it appeared to me to be one of Dr. Osborn's crotchet cases; this was the opinion I gave to Mr. Ogden, who thereon determined, for reasons of a private nature, in which I was personally unconcerned, to send her to the Lying-in Hospital in Manchester; of course, no attempt was made to deliver her."

In a former Number you have asserted that I was present at the operation, a mistake which it may also be proper to correct; for I did not even know that the operation had been performed, till Mr. Ogden called upon me and told me.

And, that you may not be farther misled, permit me to acquaint you, that it is contrary to both the letter and spirit of the rules of our Infirmary to admit women in labour, under any circumstances whatever. The rule respecting that branch of the charity, which is inscribed on every home-patient's recommendation, states that within the limits for visiting home-patients, and at their own dwellings, "Poor married women will be attended in labour by the surgeons, when the midwife cannot deliver them, on application being made at the Infirmary in the day, or to the bathman at the gate of the Infirmary in the night."

As you profess to be impartial, I am persuaded you will, without hesitation, insert these corrections in the next Number of your Review. I shall not enter into any farther explanation on the subject.

Yours, &c.

*Manchester, July* 19, 1800. W. Simmons.

*Observations by the Editors.*

Although the principles on which we conduct our Review have induced us to insert this letter from Mr. Simmons, we think it does not make any material alteration in the state of the controversy.

It was the "unanimous" opinion of the medical gentlemen who attended the patient in consultation, "that nothing but the Cæsarean operation could give any chance, either to the mother or the child;" and this opinion may be fully corroborated by an inspection of the pelvis, or of the casts taken from it. It can, therefore, have but little weight with the public to be told by the author alone, that this was "one of Dr. Osborn's crotchet cases."

As to the mistake Mr. S. supposes we have made, in regard to his being "present at the operation," we can only inform him we are not able to find any declaration of this nature in our Review.

With respect to the "Rules of the Infirmary, which," the author says, "do not admit women in labour, under any circumstances whatever," they do not in the smallest degree bear upon the present question; which is simply this, *Whether the circumstances of the case justified the Cæsarean section?*

---

Art. 11. *Remarks on Mr. Barlow's Mode of exciting premature Labour, in Cases of distorted Pelvis.* By Mr. James Leighton of London.

*To the Editors of the London Medical Review and Magazine.*

Gentlemen,

Having read an account in the last Number of your excellent Magazine, of a mode of practice successfully adopted by Mr. Barlow * in cases of distortion of the pelvis, I am induced to communicate one case that came under my care some years ago, which was not so successful.

Ann Lumber, aged 28, engaged me to attend her at the

* The reader will find a judicious and instructive section "on the propriety of bringing on premature labour, and the advantages to be derived from it," in the second volume of Dr. Denman's Introduction to the Practice of Midwifery. Octavo. Johnson. 1798. Editors.

time

time of her expected confinement. She informed me she had had five children, each of which had been taken away by bits, as she expressed it. On obtaining permission to examine her, I found the pelvis distorted; and therefore, with an intent to adopt the method alluded to, I requested to be sent for at the end of the seventh month, which was complied with. I ruptured the membranes with great ease by introducing the catheter. The waters immediately followed in large quantity. She had pains for two or three hours, as if labour was advancing; when suddenly they left her, nor had she any return till her full time was expired. The pains then came on in a regular manner; the child's head presented, and, after waiting a sufficient time, I was compelled to have recourse to the perforator.

This attempt not being attended with success, I have never since repeated it; and have been the less inclined to do so, from a conviction that it is a practice not always to be relied on; in proof of which I need only instance, that cases frequently occur, where the waters break without the use of instruments, owing to involuntary exertions, such as coughing, vomiting, or the like, but without producing labour, or preventing the patients from going their full time. If it be ever necessary to excite premature labour, I am of opinion, the only method to be depended on is to dilate the os uteri, introduce the hand, rupture the membranes, turn the child, and bring it down by the feet. In that way I have twice succeeded, and the lives of the children have been thus preserved. At the time of delivery, a napkin should be bound round the body of the mother, in order to make a gentle pressure on the abdomen; which prevents fainting, so much to be dreaded from a sudden delivery. In all turning cases, I have adopted this plan with great advantage.

I have the honour to be, Gentlemen,

Your most obedient servant,

*Thayer Street, Manchester Square, July* 21, 1800. JAMES LEIGHTON.

Art.

Art. 12. *Remarks on the Deficiency of the Gall-bladder in the human Body.* By Professor WEIDMANN.

ON examining the bodies of animals, we are sometimes surprised to discover the want of certain parts, which seem essential to the perfect exercise of their different functions. Richter, in his Medical and surgical Observations, vol. i. page 54, mentions a woman who died of the jaundice, and, on dissection, was found to have no gall-bladder; but, instead of it, there was only a membranous substance, without any cavity, about the size of a sixpence. After the publication of this curious case, many celebrated anatomists suspected that the part supposed to be deficient was merely overlooked; which cannot, however, be admitted, without doing an injustice to the observer.

A similar case, still more interesting, has very lately occurred to me. The liver of the body of an insane person, sent to our dissecting-room, was likewise destitute of the gall-bladder; nay, there was not even the smallest vestige of its previous existence, as in the case observed by Richter; but the external coat of the liver covered the place where the gall-bladder ought to have been, and not the least cavity was evident, nor any thing indicating the former existence of a gall-bladder. The duct, however, was very distinct, and indeed larger than in a natural case.

I do not presume to determine how far this absence of the gall-bladder might be connected with the insane state of the person; but it appears to me worth attention, as I found in three persons who died of insanity some defect, or change, in the gall-ducts. The subject of whom I am speaking, as far as I could learn, had never betrayed any symptoms of a diseased state arising from a difficult digestion. The natural consequence of a want of the gall-bladder, it should seem, ought to have been an increase of the appetite. This person, indeed,

indeed, was not without a good appetite, but he did not herein differ from the generality of insane people.

There might be many speculations started upon the probable means which Nature took to counteract the consequences of this absence of the gall-bladder, and to prevent a total interruption of the process of digestion; but I am satisfied with having simply stated the fact.

---

Art. 13. *Prize Questions proposed by the National Institute of France, which have been sent to the learned Societies of Europe, signed by Bonaparte as President, and countersigned by the Secretaries* *.

*First Prize, a gold Medal of the Value of a Killagramme.*

To determine, by chemical and anatomical observations and experiments, what are the phenomena of the sleep, which certain animals (such as the mountain rat, dormouse, &c.) experience during the winter, as connected with the circulation of the blood, respiration, and irritability? To inquire what is the cause of this sleep, and why it is peculiar to these animals?

The candidates for this prize are invited more particularly to inquire, what difference these animals exhibit in their state of lethargy from that which they do in their ordinary state, with regard to the beating of the pulse, degree of heat in the blood, frequency of respiration, the quantity of oxygen consumed in a given time, and their excitability by Galvanism. They will also examine the anatomical differences which distinguish these animals from such as are not subject to that state of lethargy during winter; and they will inquire if these variations are sufficient to account for the phenomena of the lethargy.

* Copies have been sent to the Royal and Linnean Societies of London.

*Second*

*Second Prize, a similar gold Medal.*

To find, by experiments, what influence the atmospheric air, light, water, and earth, have on vegetation?

*Third Prize, a like gold Medal.*

What are the characters in vegetable and animal matters which distinguish such as serve to produce ferments from those which are subject to fermentation?

Persons of all countries are admitted as candidates. The name must not be put on the manuscript, but only a device: a sealed billet may be sent with the name and address, which will not be opened except the writer obtain the prize.

The works are to be sent to the Institute under a cover of the Minister of the Interior, directed to one of the secretaries, who will return a receipt if required.

The memoirs for the first prize must be sent in before the 15th Messidor of the 10th year of the republic, and the prize will be adjudged on the 15th Vendemiaire in the 11th year.

The memoirs for the second prize must be sent in before the 1st of Nivose in the 10th year, and the prize will be delivered on the 15th Messidor in the same year.

The memoirs for the third prize must be sent in before the 1st Nivose of the 10th year, and the prize will be adjudged in the public sitting on the 15th Germinal in the same year.

[For an account of the prize questions of the National Institute, for the last year, see our Third Number, page 306.]

---

Art. 14. *Notices of the Decease of eminent medical Men.*

JANUARY 20, 1800, died, at Paris, Professor LE ROY, Member of the French National Institute, and Fellow of the Royal Society of London, &c. &c.

February 1, at Harderwyck, in Holland, in the 32d year of his age, Dr. C. P. SCHACHT, Professor of Medicine, Botany, Chemistry, and Natural History.

At

At Milan, in prison, died the Pavian Professor of Natural Philosophy, &c. C. BARLETTI; who has written several works on Chemistry, and left an excellent collection of preparations relating to comparative anatomy.

May 17, Dr. CHRISTOPHER GIRTANNER, a celebrated medical, chemical, and political writer, at Göttingen.

Friday, June the 27th, died, of an apoplexy, WILLIAM CRUIKSHANK, Esq. at his house in Leicester Square. We hope to be able, in a short time, to give our readers an authentic account of the life and writings of this eminent anatomist; likewise to announce such arrangements as may be made for the continuance of the anatomical lectures in Windmill Street.

---

Art. 15. *A Case of Small-pox having supervened after the vaccine Inoculation.* By Mr. MALIM, Member of the Royal College of Surgeons in London.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

THE following case having been the subject of much conversation and some misrepresentation, I feel it incumbent on me to give a statement of the facts to the public. By inserting it in your very useful Magazine you will much oblige

Your humble servant,

*Carey Street, July* 23, 1800. WENTWORTH MALIM.

CAROLINE WOODFORD, aged two years and a half, was inoculated with cow-pock matter taken from a child that received the disease by inoculation, with matter I procured from Dr. Jenner. On the third day, there were sufficient marks of the action of the virus; from this time to the termination of the disease, the local affection proceeded regularly and

without interruption. On the eighth day, the child complained of headach and sickness, had a quick pulse, white tongue, and increased heat, with an enlargement and tenderness in the axilla. The feverish symptoms subsided in the course of the next day, and the child remained well till the twelfth, when it had a very severe attack of fever, and on the next day an eruption was observable on the skin; the appearance, progress, and termination of which left no doubt, in the minds of several very eminent men (who saw it) of its being the small-pox.

It is proper to observe, that there was a child with small-pox in the house with Caroline Woodford during the progress of the disease, who had had the eruption out two days at the time she was inoculated with cow-pock matter.

---

Art. 16. *Monthly Catalogue of new and intended Publications.*

NEW BRITISH PUBLICATIONS.

1. ELEMENTS of the natural History and chemical Analysis of mineral Substances; for the Use of the central Schools. Translated from the French of MATHURIN JAMES BRISSON, Member of the National Institute, &c. Octavo. 148 pages. London, Walker. 1800. Price 4*s*.

2. On the Necessity for contracting Cavities between the venous Trunks and the Ventricles of the Heart; on the Use of the venous Sinuses in the Head; on the wonderful Provision made for the Transition from the fœtal to the breathing State; on Palpitation; on Death; and on Life: with Reflections on the Treatment of Animals. By JOHN WALKER. Octavo. 46 pages. Edinburgh. 1799.

3. The British Garden. A descriptive Catalogue of hardy Plants, indigenous or uncultivated in the Climate of Great Britain; with their generic and specific Characters, Latin and English Names, native Country, and Time of flowering: with

with introductory Remarks. By the Right Hon. Lady CHARLOTTE MURRAY. 2 vols. Octavo. London, Cadell and Davies. 1800. Price 16*s.*

4. Reflections on the Cow-pox, illustrated by Cases to prove it an absolute Security against the Small-pox. Addressed to the Public, in a Letter to Dr. Jenner, from WILLIAM FERMOR, Esq. Octavo. 47 pages. London, Robson. 1800. Price 1*s.* 6*d.*

5. An Address to the Public on the Advantages of vaccine Inoculation; with the Objections to it refuted. By HENRY JENNER, Surgeon, F. L. S. &c. Quarto. 19 pages. London, Cadell and Davies. Price 1*s.* 6*d.*

6. Some Observations on Vaccination, or the inoculated Cow-pox. By RICHARD DUNNING, Surgeon, Plymouth Dock, and Member of the Medical Society of that Town and Plymouth. Octavo. 122 pages. London, Cadell and Davies. 1800. Price 2*s.* 6*d.*

7. Observations on the Cow-pox. By WILLIAM WOODVILLE, M. D. Physician to the Small-pox and Inoculation Hospitals. Octavo. 43 pages. London, Phillips. 1800. Price 1*s.* 6*d.*

8. Appendix to Mr. CHARLES BELL's System of Dissections. Part First; containing additional Descriptions of the abdominal Muscles. Folio. 6 pages, and one engraving. London, Johnson. 1800. Price 2*s.* 6*d.*

9. Researches, chemical and philosophical; chiefly concerning nitrous Oxyde, or dephlogisticated nitrous Air, and its Respiration. By HUMPHRY DAVY, Superintendent of the Medical Pneumatic Institution. Octavo. 580 pages. London, Johnson. 1800. Price 10*s.* 6*d.*

10. Philosophical Transactions of the Royal Society of London for the Year 1800. Part I. Quarto. 264 pages. London, Elmsley.

11. A Series of Engravings, accompanied with Explanations, which are intended to illustrate the morbid Anatomy

of some of the most important Parts of the human Body. Fasciculus IV. comprehending the chief morbid Appearances of the small and great Intestines. By MATTHEW BAILLIE, M. D. F. R. S. L. and E. and Fellow of the Royal College of Physicians. Large 4to. with nine plates. London, Johnson. 1800. Price 1*l.* 1*s.*

12. A meteorological Journal of the Year 1799, kept in London, by WILLIAM BENT. To which are added, Remarks on the State of the Air, Vegetation, &c.; and Observations on the Diseases in the City and its Vicinity. Octavo. London, Bent. 1800. Price 2*s.*

13. Chirurgical Observations relative to the Epiphora or watery Eye, the scrophulous and intermittent Ophthalmy, the Extraction of the Cataract, and the Introduction of the male Catheter. By JAMES WARE, Surgeon. The Second Edition. Octavo. 78 pages. London, Mawman. 1800.

14. Dr. WILLICH's Lectures on Diet and Regimen, &c. &c. Third Edition. Octavo. London, Longman and Rees. 1800. Price 9*s.*

15. A practical Treatise on the different Fevers of the West Indies, and their diagnostic Symptoms. By WILLIAM FOWLE, M. D. F. R. P. S. Ed. Licentiate of the London Royal College of Physicians, and Physician to the Forces. Octavo. 93 pages. London, Symonds. 1800.

16. Memorials on the medical Department of naval Service; transmitted to the Lords Commissioners of the Admiralty. To which is annexed, an Address to Parliament on the Expediency of amending the Laws relative to the Exportation of Corn. By WILLIAM RENWICK, Surgeon in the Royal Navy. Octavo. 32 pages. London, Longman. 1800. Price 1*s.*

## NEW FOREIGN PUBLICATIONS.

17. Encyklopädie der gesammtem Chemie. Abgefasst von FRIEDERICK HILDEBRANDT: *i. e.* A summary Encyclopedia

of

of Chemistry. By F. HILDEBRANDT, Professor of Medicine and Philosophy at the University of Erlangen, &c. Octavo. Imported by Geisweiler. 1800. This work is published in separate parts.

18. Ueber die Mittel Naturgeschichte gemeinnütziger zu machen, &c. *i. e.* On the Means of rendering natural History more useful, and of introducing it in common Life, among the different Classes of Society. By F. J. BERTUCH. Quarto. 38 pages, with three plates. Weimar. 1799.

19. Entwurf eines ganz neun physicalischen Lehogebeudes für liebhaber der Methaphysik, Physick, Chimie, und Astronomie. *i. e.* A Sketch of an entire new Theory of Philosophy; for Lovers of Metaphysics, Natural Philosophy, Chemistry, and Astronomy. By SIMON OSWALD. 1799. 8vo. Munchen and Ausburg.

20. Recepte und Kurarten mit theoretishen Anmerkungen: *i. e.* Prescriptions for the Treatment of Diseases, with theoretical Annotations. By Dr. ERNEST ANTONY NICOLAI. Vol. III. Third improved Edition. 1799. 922 pages.

## INTENDED PUBLICATIONS.

21. Dr. BEDDOES has announced his intention of publishing another collection of Facts, which he thinks will entirely establish the perfect and permanent antisyphilitic virtue of the nitric acid, &c.

22. We are soon in expectation of a work on various chirurgical subjects of importance, by Mr. BENJAMIN BELL.

23. And likewise, a Treatise on military Surgery, by Mr. JOHN BELL.

24. An English translation is preparing for the public of Dr. SPRENGEL's estimable History of Medicine.

25. Dr. BAILLIE is proceeding with the Fifth Part of his Series of Engravings, to illustrate the morbid anatomy of the human body.

26. In a few weeks will be published, a Lecture on Electricity:

tricity; being an Introduction to that Science: with Three Hundred Cases illustrating its medicinal Effects. By Mr. J. C. CARPUE, Surgeon to his Majesty's Forces.

27. Likewise, by the same gentleman, a work on Anatomy, accompanied with Plates, for the Use of Students.

28. A Second Edition, much enlarged, of Dr. CHISHOLM's Essay on the malignant and pestilential Fever of Grenada, is in the press; comprehending additional facts and illustrations in support of its nature and treatment as formerly described; with observations on contagion, the endemial fevers of the West Indies, the effect of the nitrous acid, and oxygenated muriate of potash, in several diseases, &c.: the whole forming two volumes, 8vo.

29. Dr. WILLAN has nearly printed the Second Part of his Treatise on cutaneous Diseases, illustrated by coloured figures, comprehending the morbid appearances denominated *scales*.

30. The manuscript copy of a work, entitled Essays on the Natural History of Paraguay, by Don FELIX AZARA, brother of the late Spanish ambassador to Paris, has been put into the hands of Moreau de St. Méry, to be translated into the French language. This work will be comprised in two octavo volumes; giving a description of eighty quadrupeds, interspersed with new and interesting observations.

31. M. ACHARD has promised a work in which he will detail the manipulation, extraction, and refining of European sugar, (from the plant called *runkelruebe* or *mangoldruebe,*) illustrated with plates representing the most necessary utensils employed in this art.

32. Dr. BLAKE, of Dublin, is writing an interesting treatise on the Structure and Economy of the Teeth.

33. Dr. BOUTTATZ is preparing for the press a new English work, on the medicinal Properties of Phosphorus.

---

*** The List of new foreign Books was abridged for want of room.

Art.

## Art. 17. *Answers to Readers and Correspondents.*

1. WE inform CURIOSUS that there is no reason to expect a copy or abstract of the royal charter (which has been obtained by the surgeons in London) will be circulated among the members of the late corporation; as there is no material alteration made by it in the constitution of the company, nor any which alters or affects the rights, powers, or privileges of its members.

The circumstances in which this charter varies from the late act of parliament are, that it changes the name into that of College; that it enables the body corporate to possess 1000*l.* a year in mortmain, instead of 200*l.*; that it provides against a future dissolution of the body, by declaring that one of the three governors shall be sufficient to hold a court, instead of two; and, if all the governors should be dead, or incapable of acting, that the senior assistant may hold a court for the election of others. It declares also that the two serjeant surgeons to his Majesty, and the surgeon-general, shall always be, *ex officio*, members of the court; but in all other respects, it leaves the rights of the members, and the powers of the court, precisely as they were under the late act.

2. In answer to SCRUTATOR's inquiry, "What case it is, on the subject of extra-uterine fœtation, that Dr. Sims alludes to in the eighth volume of Medical Facts, quoted in our Review for the last month, p. 375?"—we believe it to be that published by Mr. Turnbull, in the Memoirs of the Medical Society of London.

Mr. SAVIGNY has promised us (in consequence of SCRUTATOR's request) a more complete description of his newly invented scarificator and glyster-machine, which were noticed in our Number for May.

The College have frequently altered their bye-laws, particularly that relating to the admission of physicians into the list of *Permissi*, intending to practise in London. A few

years ago, they only required the candidates for that class to exhibit their diploma; but for some years past they have obliged them, besides their diplomas, to produce certificates of residence for the space of three years at the college where they graduated. Licentiates practising at a distance from the metropolis are only required to produce their diplomas, which are accepted in whatever way they may have been procured.

3. We beg leave to acquaint our correspondent at Coventry, and country practitioners in general, that on addressing a line to any of our publishers, the numbers of this Review will be forwarded every month to their respective booksellers in any part of the kingdom. Foreign agents may be supplied through the same channel.

4. In our Number for September next we mean to give a list of the various lecturers on medical and philosophical subjects in Edinburgh, London, and other parts of the kingdom. In the interim we shall be obliged to the different professors and teachers to transmit their proposals to our printer.

We shall likewise be obliged to the secretaries of medical societies, for an account of their prize questions, and the adjudication of their prizes for the preceding year.

5. Mr. BLAIR's Reflections on the Use of caustic Substances and metallic Bougies, in Strictures of the Urethra, will find a place in our next Number.

6. The communication respecting the anodyne effects of Camphor, proposed to be sent to us by H..... will be acceptable.

7. Dr. BATTY's signature came too late to be added to the Testimonial in favour of vaccine Inoculation.

---

The Engraving of Dr. THILOW's Instrument for dislodging gaseous Fluids is to face page 75.

THE

# LONDON MEDICAL REVIEW

AND

# MAGAZINE.

VOL. IV. N° XVIII. AUGUST MDCCC.

## ANALYSIS OF BOOKS.

ART. I. *Essai sur les Combustions humaines, produites par un long Abus des Liqueurs spiritueuses.* Par PIERRE AIME' LAIR. 12mo. 100 pages. Paris. An VIII.

HUMAN combustion bears some resemblance to the match of miners; which, when lighted at one end, burns insensibly to the other, without any addition of combustible matter. The author cites many examples of these combustions. The fact is, therefore, incontestable; and he attempts to give a plausible explanation of so remarkable a phenomenon.

1. Persons, he says, who have been subject to combustion, were those who had been a long time addicted to the free use of spirituous liquors. — This happens, because among such persons the absorption and penetration of alzoolic matters take place through all the animal economy.

2. The combustion has only happened among women.—This, the author thinks, arises from the texture of the soft parts in women being more spongy than in men, and therefore better adapted for absorption.

3. These subjects have been principally old women—women advanced in years, being more addicted, he says, to drinking, living more sedentary lives, and being more disposed to obesity.—We think the author here contradicts himself; the soft parts, that is the flesh, of old women not being so spongy nor so well adapted for absorption as the soft parts of younger subjects.

4. Their bodies have been burned, not spontaneously but accidentally.—The bodies consumed in this manner have always been found near a stove, a lamp, or a candle. When persons are making burnt-brandy, if they come within a certain distance of the light, the flame suddenly seizes the liquor. M. Lair denies the possibility of spontaneous combustion in the human body.

5. The extremities of these women have been spared by the fire.—The bones are in general very difficult to consume; those of the trunk, being surrounded by the flesh and the fat, present smaller obstacles to incineration.

6. Sometimes water, instead of extinguishing the fire in the parts of the burning body, only gives it more activity.—We know that if we throw water on certain fatty or spirituous matters, when inflamed, such as oil or brandy, the fire becomes more lively.

7. The fire has but little damaged and has often spared combustible matters, which have been in contact with the human body when burning.—This arises from the fire which issues from drunkards being of a peculiar quality, and much resembling pyrophorus, which burns very slowly and with little activity. We know that when we heat spirits of wine a second time, the same match serves a long while before it is consumed or even blackened.

8. Lastly.

8. Lastly. In the combustion of these bodies, the residue has been greasy and fetid ashes; an oily soot, stinking, and very penetrating.—These results do not afford any thing very extraordinary: they always take place on burning animal substances. *L'Espr. des Journ.*

---

ART. II. *Memorials on the medical Department of naval Service; transmitted to the Lords Commissioners of the Admiralty. To which is annexed, an Address to Parliament, on the Expedience of amending the Laws relative to the Exportation of Corn.* By WILLIAM RENWICK, Surgeon in the Royal Navy. Octavo. 32 pages. LONGMAN and REES, London. 1800. Price 1*s.*

MR. Renwick again stands forward as the advocate of his brethren, the navy surgeons, and shews the mischievous consequences of the parsimony of government in respect to them.

"How forlorn," he says, "in the present state of the country, is the consideration, that though extended till the eve of life, services so highly respectable are only to look for a reward of half a crown a day; and that, with the exception of twenty survivors, it is never to exceed three shillings!!

"Posterity will regret that such were the terms where indispensable officers were so difficult to procure, and of whom so many hundreds were never procured. Under such circumstances, of what utility, for restraining hæmorrhage, are instruments furnished at the public cost which only professional hands have skill to apply—what avail the chests where vacancy suspends, or substitution frustrates the intent of prescription?"

The author's language, it will be observed, is perplexed and obscure; but with such good intentions, it would be invidious to censure that slight defect.

On the subject of the corn laws, he says, as it is now ascertained and acknowledged that the country cannot be made

to produce a sufficient quantity of corn for the consumption of the inhabitants, the law allowing it to be exported when the price is reduced below a certain standard, should be repealed. To the existence of that law he attributes the present scarcity.

There is much good sense and philanthropy in this little pamphlet, and we are sorry to find, from some intimations in it, the author's zeal has been but slenderly rewarded.

---

ART. III. *Essai sur le Perfectionnement des Arts chimiques en France.* Par J. A. CHAPTAL, de l'Institut National, Conseiller d'Etat. Octavo. 96 pages. Paris. Imported by DE BOFFE. Price 2*s*. 6*d*.

TO announce a work of Chaptal's is generally sufficient to command the attention of learned men. This we are now speaking of deviates much from the author's usual productions.

Hitherto Chaptal had written as a chemist, he had given us *memoirs* on various parts of chemistry *applicable to the arts*. Now he gives the public a plan for general instruction; so well considered and so judiciously laid, that if it were put in practice, we should not entertain a doubt but that the arts and national industry would be carried to the highest point of perfection, and would give the French manufactured productions a preference in all the markets of Europe.

Men, things, circumstances, the whole, the various detached parts, are here attended to by the author; nothing has escaped his sagacity, so true is the remark, that it is easy to present in a clear and succinct manner, whatever we have meditated on for a long time. His subject, although dry in general, does not fail to afford some well-digested parts, conceived in energetic and sometimes eloquent language.

The author's chief view, in other respects, has been to shew the proper method of forming workmen, of rendering manufactures

factures more economical, and to point out the most convenient situations for different sorts of manufactures.

His plan is, to form four grand schools; the first to be appropriated to the arts of dying, of printing linen, and the animal preparations. The second, to the knowledge of metals and their preparations. The third, to an acquaintance with earths, their uses in the fabrication of pottery and glass. The fourth, to teach the formation of salts; how to extract the acids and alkalies, to distil wines, the aromatic plants, and to combine perfumes.

Colbert was long ago sensible of the necessity of extending the powers of art, with a view to increase public prosperity. He conceived plans, created manufactures, supported them with all the powers of government, and by this means brought into action the plan he had formed to give activity to commerce, by reviving industry.

If the French government should be impressed with the great and useful projects now made public in Chaptal's work; if they pursue all his developements, like Colbert, they will deserve the national gratitude. *L'Espr. des Journ.*

---

ART. IV. *Mr.* WEBSTER's *Brief History of epidemic and pestilential Diseases.*

(Concluded from page 19.)

WE shall pass over a long list of pestilences, each of them preceded or accompanied by comets, volcanoes, earthquakes, &c. which infested and desolated the earth, from this period to the latter end of the sixteenth century, and give the author's observations on the fever which broke out at the assizes at Oxford, in the year 1577.

"This also," he says, "was the year in which a sudden disease seized the court and attendants at the Oxford assizes, in England. Early in July, while the court was sitting,

'there arose,' says Stowe, 'amidst the people such a damp, 'that almost all were smothered; very few escaped that were 'not taken at that instant. The jurors died presently—after 'which, Robert Bill, lord chief baron. There died in Ox-'ford three hundred persons; and sickened there, but died 'elsewhere, more than two hundred, from the 6th to the '12th of July. After which died not one of that sickness, 'for one of them infected not another, nor died thereof any 'woman or child.'

"This sudden catastrophe is ascribed to a damp or vapour. But there is no need of resorting to such a cause. The atmosphere, during the period under consideration, was not furnished with the power of supporting animal life in as ample a manner as it usually is. This is evident from the universality of mortal epidemics. In this state of the atmosphere a multitude crowded into a court-room, in the hot month of July, must speedily destroy all the respirable air, and death must ensue. That the principal cause was not only local, but sudden, is demonstrated by the circumstance that no infection accompanied the diseased. Had the cause of their illness been long in operation, it would have produced in the body that species of poison which is noxious to persons in health. Persons suddenly deprived of life, as by damps in wells, or the fumes of charcoal, communicate no infection. And it is possible this catastrophe might have been owing to a sudden discharge of mephitic vapour."

It is suggested by some writers, that this disease was occasioned by an infected prisoner, who was brought from jail into court; but Stowe does not mention this circumstance.

"In 1618 appeared a remarkable comet in November, (Short mentions four,) and a town in Rhetia was overwhelmed by an earthquake. Violent tempests, inundations, and hurricanes, are recorded of the same year; and in Bermuda, the year following, a storm tore up the strongest trees by the roots. In 1619 Heckla discharged her fiery contents.

"In

" In 1618 broke out in Naples a malignant angina, which ravaged the place for many years. The plague appeared at Bergen in Norway, in Denmark, and in Grand Cairo. This was the beginning of a very pestilential period, and here must be introduced the terrible pestilence which wasted the American Indians, just before our ancestors landed in Massachusetts. As this is one of the most remarkable facts in history, and one that demonstrates the general causes of plague to belong to other climates, besides those of Egypt and the Levant, I have taken great pains to ascertain the species of disease and the time of its appearance.

" Captain Dermer, an English adventurer, who had arrived in America in a fishing vessel a year or two before, passed the winter of 1618 and 1619 in Montriggon, an Indian town on the northern coast. On the 19th of May 1619 he sailed along the coast on his way to Virginia, and landed at several places where he had been the year before, and he found many Indian towns totally depopulated — in others a few natives remained alive, 'but not free of sickness; their 'disease, the plague, for we might perceive the sores of some 'that had escaped, who described the spots of such as usually 'die.'—These are Purchas's words. He found some villages, which in his former visit were populous, all deserted—'the 'Indians all dead.'

" The kind of disease is another important question. Dermer seems to think it a species of plague, and he saw some of the sores of those who had survived. Hutchinson, vol. i. p. 34, 35, says some have supposed it to have been the small-pox; but the Indians, who were perfectly acquainted with this disease, after the English arrived, always gave a very different account of it, and described it as a pestilential putrid fever.

" Fortunately," the author observes, " General Gookin has left us a fact which leaves no doubt as to the nature of the malady.

" His

" His words are—' What the disease was which so gene-
' rally and mortally swept them away, I cannot learn.
' Doubtless it was some pestilential disease. I have dis-
' coursed with some old Indians, that were then youths, who
' say that the *bodies all over were exceeding yellow* (describing
' it by a yellow garment they shewed me) both before they
' died and afterwards.'

" This account may be relied on for its authenticity, and it decides the question, that the pestilence was the true American plague, called yellow fever. If any confirmation of this evidence were necessary, we have it in Prince's Chronology, where it is recorded that this fever produced hæmorrhage from the nose.

" At the time Gookin wrote, about forty or fifty years after the settlement of New England, the infectious fevers of autumn were called ' pestilent,' and they were frequent in the country, but had not then acquired the appellation yellow.

" The evidence," the author adds, " of the origin of the yellow fever in this country, for they at that time had no intercourse with the West Indies, is complete."

Although we do not admit, as we have before intimated, that the author has made out his assertion that the yellow fever and other highly infectious complaints are never imported or introduced into a country by the arrival of persons or goods from places where such fevers rage, yet the multifarious evidence he has adduced seems clearly to prove that those diseases do originate in widely distant countries: great credit is therefore due to him for the uncommon labour he has taken in collecting such a mass of materials upon the subject. It may save much trouble to future inquirers. We do not, however, pretend to vouch for the correctness of all his references; as far as we have examined them, we found them correspond: but to have gone through them all, would have taken nearly as much time as it cost him to make his book. The idea, we will add, that comets influence both the physical

sical and moral state of this globe, is by no means new. Many marvellous stories are related of the power both comets and planets possess in directing the affairs of this world. Modern scepticism rejects them all as idle dreams, more fit for the nursery than the schools. In this, perhaps, we may be found to have erred nearly as much as our ancestors did by their too easy credulity.

Following our author in his investigation of the origin of epidemic diseases, we shall find him attributing the rise of small-pox to the same general causes that give birth to the yellow fever and other pestilential complaints. From the year 1630 to 1637, Europe and America were dreadfully annoyed with pestilential complaints. In 1631 a memorable earthquake happened in Naples, with a tremendous eruption of Mount Vesuvius, which lost at this time, Baglivi informs us, two hundred and forty feet of its altitude; cotemporary with these, an erysipelatous fever wasted Europe, as we learn from the bills of mortality for London, Augsburg, and Dresden, where the progress of the malignity in the epidemics is distinctly marked by an augmentation of the deaths, till the plague in 1636. In 1633 appeared a comet, which was followed by a severe winter in Europe. The same winter, as we learn from Winthrop's Journal, was mild in America, until near the end, when there were heavy snows. An eruption of Mount Etna commenced at this time, which continued four years, that is, through the whole pestilential season. "At the same time," our author says, "the Indians were invaded by the small-pox, which swept them away in multitudes. It spread from Naragansit to Piscataqua, and westward to Connecticut river."

The summer of this year was remarkable for innumerable large flies, of the size of bees, which made the woods resound with a humming noise.

"We have then a remarkable evidence," he adds, "of the extent of a pestilential principle in the elements. The same

same species of diseases appeared at the same time in Augsburg, Dresden, London, and in America. Probably the same species prevailed over most of Europe, for we hear of them in every part of Holland in the following year. The diseases predominant previous to the plague are of the eruptive kind; such was the case in the present instance. In America the epidemic among the Indians took the form of the small-pox; and although it is the current opinion that the small-pox is communicated only by contagion, yet my investigations have satisfied me that this is a great error. The small-pox is one of the family of eruptive diseases, which belong to almost every pestilential period. Before its origin and progress had been affected by the art of inoculation, it used to be epidemic in large cities, under that inflammatory condition of the atmosphere which originated measles, influenza, anginas, and plague, and rarely or never at any other time. This disease, therefore, though communicable at any time by infection, is generated in particular habits without any infecting cause *ab extra*; and is the offspring of that state of the atmosphere which generates other eruptive epidemics."

In the year 1665 ninety-six thousand persons died in London, sixty-eight thousand of the plague, and twenty-eight thousand of other complaints, that is, of malignant fevers, the usual precursors of the plague. In the preceding year there had been a great mortality among the cattle.

The cessation of the plague in this country, since that period, has been attributed to the fire which consumed half London in the following year; to the houses being built larger, the streets wider and more airy; to a more plentiful supply of water; to a more general introduction of sewers; and to new habits of living. These, without doubt, our author observes, might contribute to abate the malignancy of the plague, but will hardly account for its entire disappearance; the rather, as it has not been seen in Paris or Amsterdam since that time, although they retain their old construc-

tion;

tion; nor, we may add, in any of the large towns in this country, or in Scotland, which were late in adopting those improvements.

In the year 1700, the pestilential constitution of the air shewed itself by a destructive sore throat, in the island of Milo, in the Levant. Tournefort says, "it appeared in the form of a carbuncle, or plague sore, in the bottom of the throat, attended with a violent fever. It carried off children in two days, but spared adults, whence it was called the children's plague." Dr. Fothergill considered this as a new disease, and could only trace its history to the year 1710: our author finds it described in the year 1564, and then not noticed as a new disease.

"It has some resemblance," he says, "to the true pestis, the ulcer being formed in the throat instead of the glands. The insidiousness of the distemper is another circumstance of resemblance—persons in both diseases often walking about a few hours before they expire. But this is a most prominent fact, that the ulcerous sore throat, or malignant angina, are rarely or never epidemic, except in periods when the plague and yellow fever prevail in places where they usually appear. In no instance has the sore throat been epidemic in America, except when the plague has been raging in Egypt and Constantinople. At least I can find no exception to this remark; and what is more, the virulence of the one disease in one country corresponds with the malignity of the other disease in the other countries. Thus, as the plague in Egypt in 1736 was far more destructive than the same at other times, so was the angina maligna of that period in America.

"When observation and philosophy shall prevail over the prejudices of men in regard to the origin of these diseases from infection, it will be found that the angina, in its various forms, is only a particular stage or modification of the pestilence which spreads over the world at certain unequal periods. The milder forms of the pestilence appear in catarrh, measles, and

chin-cough, which usually appear together, or nearly so, at the beginning of the more virulent general contagion; the later and more fatal stages are marked by anginas, cynanche maligna, petechial fever, bilious and glandular plague in summer, and pestilential pleurisies in winter."

We shall again pass over the history of a long series of epidemics, with their usual harbingers, comets, eruptions of volcanoes, inundations, earthquakes, storms, swarms of insects, mists, severe frosts, &c. to the commencement of the last epidemic, the yellow fever.

In July 1788 there was a violent tempest from the N. E. which occasioned a very high tide in the Chesapeak.

"A gale from the N. E." our author says, "in June or July, on the American coast, must be attributed to some extraordinary cause; and perhaps this may be ascribed to the approach of a comet, which appeared in October and November following. This comet was predicted by Mr. Herschel, who made preparations for examining it.

"The summer was remarkably tempestuous. On the 19th of August a severe gale of wind did great damage in many of our ports. Of thirty sail of vessels in certain rivers and bays of North Carolina, twenty-six were destroyed. A tempest in the beginning of that month had been terribly destructive. No event is more certain than a vast increase of tempestuous weather while comets are near the earth. The tempest of the 19th extended over the whole face of the country, penetrating to Vermont, levelling trees, corn, and buildings. Many cattle, and one child, were killed by falling timber and trees. To enumerate the particulars would fill many pages.

"It is remarkable that this tempest in the United States became in two or three days after a tremendous hurricane among the Windward Islands, which was supposed to do more injury than the great tempest of 1766. At the Leeward, the same calamity befell the islands. In Martinico the barometer fell nearly to twenty-seven inches.

"About

" About the same time the same disasters befell France and England. A tornado of great violence occurred about Paris, in which the gazettes declare, hail-stones fell of 8lb. (ounces perhaps) weight. During a tempest in London a fire-ball entered a house, and struck down two persons.

" In the West Indies hurricanes were repeated in September with destructive rage.

" On the evening of the 17th of October 1788 was seen, at various places in Connecticut and New York, a meteor or fire-ball, whose apparent diameter was equal to that of the sun in the meridian. It passed from the eastward to the westward with amazing rapidity, illuminating the earth, and approaching near the western horizon, it burst with a loud report.

" The comet above mentioned appeared about this time. It rose about three o'clock in the morning in the north-east.

" In November 1788 appeared the measles in New York. On its first invasion it appeared with great malignity. The same distemper appeared in the northern liberties of Philadelphia in December, and spread till it became epidemic in February and March.

" It is remarkable, that almost all the codfish taken in 1788 on the banks of Newfoundland were thin and sickly; when dried they were of a dark or bluish colour, little better than skeletons, and not well received in foreign markets. This condition of the fish was confined to those on the banks, as the cod taken at other places were in their usual state.

" The winter of 1788-9 was colder than usual in the United States. On the morning of the 2d of February the mercury in Fahrenheit fell to 28° below 0, four degrees lower than had been before observed at Hartford. The season, however, was, on the whole, less severe than in 1780 and 1784.

" In Europe the winter appears to have been unusually severe. The frost penetrated to the southern parts of Spain and Portugal, and the rivers in Estremadura and Alantejo were covered

covered with ice. The Pyrennees were involved in deep snow in March.

" On the 28th of May 1789 appeared in Connecticut a most singular halo, of which the public prints contain a particular description. This phenomenon seems to indicate the approach of tempestuous weather, and was in this instance followed by heavy wind and rains. When this appearance is of singular brightness or extent it indicates a state of the atmosphere highly electrified perhaps, and certainly tempestuous. Storms are usually numerous and violent. Thus the remarkable hurricanes of 1780 were preceded by as remarkable halos. The halo of May 28 was preceded by a most splendid lumen boreale.

" The spring of 1789 was cold, and vegetation tardy, beyond what could be recollected by the oldest persons living. A part of the summer succeeding was excessively hot. For nine or ten days successively in August the heat was above 90°, and in the midst of the day it rose to nearly 100°. The mean temperature of the summer, however, was not much above what is usual.

" On the 4th of June ice at Wyoning was as thick as window-glass.

" The failure of crops in the Carnatic, in 1788, occasioned a severe famine, by which thousands perished in the succeeding year.

" In Madras died thirty thousand by famine in 1788.

" The empire of China experienced the same calamity, and the people suffered indescribable distress from famine and disease.

" In Europe also crops failed, and England, Holland, and France apprehended the most calamitous effects. In Paris the cry of *Bread, bread!* was every where heard, and many riots and mobs evidenced the distress of the inhabitants.

" In this instance crops failed over the whole earth at the same time.

" The

" The hydrophobia shewed itself in America early in 1789.

" In Maryland the autumn was distinguished by an unexampled mortality among horses.

" On the 10th of July a most tremendous earthquake convulsed Iceland. Large chasms were opened in the earth, and some mountains were rent asunder. Several shocks happened on subsequent days, and a violent shock in September is mentioned in the sixth volume of Sinclair's Statistical Account of Scotland, p. 625.

" On the 30th of September occurred a violent earthquake in Tuscany, by which some villages were destroyed, and several thousand lives. On the same day, but not at the same hour, a small shock was felt at Edinburgh. On the 5th of November a shock was felt at Crieff, fifty miles from Edinburgh, and on the 10th and 11th severe shocks were felt at other places.

" On the 4th of December arrived at Leith, Capt. Stewart, of the ship Brothers, from Archangel in Russia, who informed, that on the coast of Lapland and Norway he sailed many leagues among multitudes of dead haddock floating on the water. He spoke several ships which also passed among them.

" In October Vesuvius was in a state of eruption for several weeks, and discharged small streams of lava. The plague prevailed at Smyrna and Constantinople.

" On the 29th of October, from two o'clock P. M. to half after four, Kentucky was enveloped in thick darkness, so that people were obliged to use candles.

" It will be observed, that this darkness coincided nearly in time with the beginning of the influenza in America, with the eruption of Vesuvius, and with many earthquakes.

" Such universal disorders in the elements never fail to produce epidemic diseases; and those here related were the heralds of the most severe period of sickness that has occurred in the United States for thirty years.

"The first appearance of that series of epidemics to be hereafter described, seems to have been in the measles at New York and Philadelphia, in autumn 1788. This disease became epidemic over the northern states in 1789, but I have not the means of describing its progress. I find in bills of mortality, from various places, deaths by measles in 1789 and 90.

"In autumn 1789 appeared the influenza or epidemic catarrh. The precise time and place of its first appearance are not ascertained. Some accounts say it originated in Canada." But the author confines his remarks to its progress in Atlantic America.

This disease was first observed, he says, about the close of September 1789, in New York and Philadelphia. Dr. Rush informs us, it was brought to Philadelphia by the members of Congress, who returned from New York about the 1st of October. Another account, written by one of the faculty in Philadelphia, and published in the seventh volume of the Museum, mentions its first appearance there about the time of the Friends' yearly meeting in September. The precise time is probably not ascertainable. The opinion of its propagation by contagion is, our author thinks, very fallacious. It probably appeared in detached cases, some days before it became a subject of observation.

The distemper pervaded the wilderness, and seized the Indians; it spread over the ocean, and attacked seamen a hundred leagues from land, who, as to infection, were entirely insulated. It appeared in the West Indies nearly at the time it did in the northern states; it overspread America from the 15th to the 45th degree of latitude, in about six or eight weeks, and how much farther it extended is not known.

"It should have been mentioned," the author says, "that in September, anterior to the invasion of the catarrh, the scarlatina anginosa appeared in Philadelphia, but in October it yielded to the influenza, the controlling epidemic. The scarlet

scarlet fever reappeared in December, and became epidemic, often blending itself with the influenza; it exhibited one predominant feature of the whole series of succeeding epidemics, a prevalence of bilious matter, which was often discharged by purging and vomiting. This disease continued to prevail in Philadelphia, and, if my information is correct, in some parts of New Jersey, till the spring of 1790. The measles occurred in some cases, but was not epidemic.

"It is remarkable, that the scarlet fever appeared at Edinburgh nearly at the time of the epidemics just described, and of the death of the haddock on the coast of Norway.

"It should be remarked that the scarlet fever, though epidemic in Philadelphia, did not spread over the country in 1790. It was hardly known in the northern states till two years after. This is among the proofs that this disease does not depend on infection for its propagation. If infection was its only or principal means of propagation, the fomites existed in great abundance, in particular states, in 1790, and sufficient to have spread it over the United States. But a disease, however infectious, will not spread far in an atmosphere that will not generate it. Indeed scarcely a year passes in which sporadic cases of scarlatina or anginas of other kinds do not appear in particular places, but they never spread without a concurrence of elemental causes.

"The spring and summer of 1790 were mostly rainy, but otherwise seasonable weather. No remarkable epidemics prevailed, except those already described; but in many places the registers of deaths exhibit a considerable increase of mortality. Severe earthquakes occurred on the African coast.

"On the 15th of January a considerable shock of earthquake was experienced at Richmond in Virginia. At the same time catarrhs were so prevalent in that state and in Pennsylvania, as to excite an apprehension of another visit of the influenza. Inflammatory diseases were very frequent during the winter. In Philadelphia the scarlatina anginosa

appeared late in February, and was very prevalent in March. In the interior of Carolina it was sickly, but I have no particulars. The hooping-cough prevailed in many parts of the country.

" In the month of April some fishermen at the Narrows, near New York, caught fourteen thousand shad at a single draught; to secure which it was necessary to add several seines, one upon another. This circumstance is mentioned because several medical writers have related that an extraordinary abundance of fish is among the precursors of pestilence. It will be noted, that the pestilential fever which has prevailed for many years past, first appeared in New York in the autumn succeeding this singular draught of fish.

" On the 16th of May, at half after ten o'clock, in a serene moonlight night, an extensive earthquake was felt in the northern states. It was preceded a few seconds by a rattling sound; its duration was short; its course, as usual in America, from N. W. to S. E. No injury was sustained.

" On the morning after the earthquake was observed, at Middletown, in Connecticut, a substance like honey or butter, covering the grass and earth for a considerable extent." A similar phenomenon appeared in Ireland in the year 1695.

" To these phenomena succeeded in Connecticut the generation of millions of that species of black worm described under the year 1770. I believe they were far less numerous than in 1770; they, however, appeared in great multitudes, and disappeared at various places about the same time. They were very destructive to the grass and corn, but their existence was only of a few weeks duration.

" A paragraph in a Maryland paper, dated June 1, 1791, mentions animals there called caterpillars, but evidently the same species of worm. They are represented as marching in legions from place to place, and devouring the grass.

" About the same time appeared at Lansingburg, on the Hudson, a species of worm that greatly injured the fruit-trees.

" But

"But the most extraordinary phenomenon was the existence of canker-worms in numbers before unexampled. Whether these animals had made their appearance in the years preceding I do not recollect, but in 1791 they devoured the orchards over the New England states; and their ravages were repeated in the two following years. Orchards standing on stiff clay, and in low grounds which were wet in spring, escaped; but on every species of light and dry soil the trees were as dry on the 1st of June as on the 1st of January. Many trees have never recovered from the effects of their ravages.

"Another worm, of a distinct species, called the palmer-worm, overspread our forests in this or the next year, devouring the leaves of the oak and other species of wood.

"It is a prevalent opinion, that uncommon flights of wild pigeons in America indicate the approach of a sickly season. I am not inclined to credit popular opinion without good grounds; but this seems to have been formed on a long series of observations. Certain it is, that pigeons in the summer of 1791 were unusually numerous. In Maine there were tracts of forests of miles in extent, whose trees were covered with their nests.

"The summer of 1791 was excessively hot. At Salem the thermometer was at and above 80° no less than fifty-five days, and above 90° twelve days; an instance that had not happened in many years in that cool place, although it often happens in the middle states.

"On the 27th of November Lisbon sustained severe shocks of earthquake.

"In autumn, bilious remitting fevers assumed, in Philadelphia, the inflammatory diathesis, so predominant in the last pestilential constitution. Dr. Rush, in his public lectures at the time, mentioned this fact, although he little suspected what effects that constitution was to produce in subsequent years. It was found necessary to bleed, from one to three

times. In most cases the liver was affected with all the symptoms of hepatitis.

" At this period the pestilential or epidemic constitution of the atmosphere began to shew itself in the infectious yellow fever. It appeared in New York in autumn along the East River, and carried off about two hundred persons.—This gave some alarm, which soon subsided.

" In the summer of 1791 also the pestilential principle began to shew its effects in the increased malignancy of the tropical fevers. The 'unusual epidemic fever' in Grenada, described by Dr. Chisholm in the Edinburgh Medical Commentaries for 1793, and which was the occasion of no small surprise, was the commencement of that series of fatal diseases, which, in subsequent years, made dreadful havoc in the islands. This fever became so violent and infectious, contrary to the common fever of the tropics, that a laboured attempt has been made to trace it to fomites from the coast of Africa. The truth is, the fever was nothing more than the common fever of the climate, with the superadded malignancy derived from the existing constitution of the elements. The same fact took place on the African coast; that is, the usual fevers of the climate became more malignant. This idea is suggested by a series of similar events in other climates; all the diseases of America at the same time assuming a similar augmented violence, and sporadic cases of malignant fever appearing in all parts of the country. Such has been the fact in all other epidemic periods.

" To confirm this idea, let it be observed, that in the same year when this malignant fever appeared in the African seas, on board of ships, in Grenada, and in New York, as well as in other parts of America, the plague carried off two or three hundred thousand people in Egypt, and raged in Constantinople with great mortality. In all these different countries the same or similar effects were nearly cotemporary. The plague in Egypt continued into the next year, but I have no details

details of its progress and termination. The same general principle was experienced in Great Britain, and the bills of mortality continued to swell until the year 1793.

" In May and June 1792 a species of locusts in the northern parts of the state of New York preyed upon the grain. The wheat-insect continued its ravages, and appeared this year as far southward as Elkridge, in the state of Maryland. On Long Island the destruction of wheat was great and distressing.

" In July happened at Philadelphia a violent tornado, but the summer was not distinguished by the number of this species of tempest. In one instance, in Vermont, the hail-stones which fell are said to have been from three to six inches in circumference.

" About this time a malignant fever began to rage in Charlestown, South Carolina, carrying off the patient in three days, and occasioning a considerable mortality.

" In the following winter Egypt was a prey to famine, and the streets of Cairo were filled with dead bodies.

" In November 1792 several smart shocks of earthquake were felt in Perthshire, a county in Scotland.

" In Philadelphia appeared an insect in the form of a fly, which generated a small worm or caterpillar, that attacked the tree called lime-tree, which is there used for shade. From that year to the year 1798 this insect has preyed upon those trees, and destroyed some of them. Just philosophy will not hesitate to believe the cause of this phenomenon, and of the pestilence succeeding, to be connected.

" In 1792 commenced that scarlatina anginosa which became epidemic, with great mortality. I regret that a want of exact registers will not permit me to trace it to its sources with the precision desirable in all such cases. I am informed that well-defined cases of the disease were observed in New York as early as the month of August; but it occasioned no considerable mortality in that city till the following winter.

" On

"On the 11th of January 1793 was discovered a comet in the constellation of Cepheus. It was seen for the last time by Mr. Rittenhouse on the 8th of February.

"In the course of this winter and the spring succeeding, the scarlet fever raged in New York with considerable mortality. It became epidemic in Philadelphia also in the course of the spring months. Catarrh was very prevalent in the northern states at the same time; and the small-pox, by inoculation, at Hartford, proved unusually obstinate and fatal, indicating an insalubrious state of the atmosphere.

"In January 1794 arrived the crisis of this disease; it put on its malignant symptoms, and in the course of the six following months seized more than seven hundred persons, chiefly youth, of whom died fifty-two.

"In August 1793 commenced in Philadelphia that dreadful pestilence which alarmed the United States, and spread terror and dismay over that city. The spring diseases which ushered in this malady were influenza, scarlatina, and mild bilious remittents. (See Rush on that disease.) These are the most certain and immediate precursors of pestilence in this country, and the influenza seems to be so in all countries.

"During this epidemic the weather was very sultry and dry. About the 12th of September a meteor fell between the city and the hospital. The number of victims to the malady was four thousand and forty.

"A controversy arose among the physicians in Philadelphia relative to the origin of the plague; one party tracing it, as they supposed, to infected vessels from the West Indies, the other ascribing it to exhalations from damaged coffee and filthy streets. This controversy has occasioned an unhappy schism among the faculty and the citizens of Philadelphia.

"It is greatly to be regretted that medical gentlemen committed themselves by prematurely giving positive opinions on that important question, and thus laying the foundation for permanent evils to the country. It would have been wiser to

have

have instituted a regular inquiry into historical facts relative to pestilential diseases, antecedent to any positive decisions on the subject.

"While this plague raged in Philadelphia, a similar pestilence carried off thousands of Indians on the borders of Lake Michigan."

Having brought the history of epidemics to the present time, and shewn their dependance on disturbances in the elements, and these again, on the appearance of comets, the author, in the second volume, recapitulates the facts and arguments he had adduced in the first part, and introduces bills of mortality from different countries, to corroborate his arguments, and cites a variety of authors, from Aristotle to the present time, who have held a similar opinion of the influence of the heavenly bodies on the salubrity of the air. But we consider the historical as the most valuable part of the work, the author, like other disputants, not being very choice in his arguments, or using the same argument to prove two opposite positions. From the whole tenour of the work we are given to understand, that epidemics take their rise from causes vitiating the atmosphere, and the mortality at the Oxford assizes is attributed to a deficiency of oxygen, or of the vital principle in the air; but in p. 354 he attributes the exemption of persons confined in prison from the disease, to their breathing a less stimulating air, that is, breathing air possessing less oxygen. We cannot, however, help thinking, that exclusion from all commerce with the infected was a principal cause of their escaping; for the depression of spirits and debility consequent on confinement, must have made them peculiarly liable to infection, if the air had contained the fomes of the disease, as the author supposes.

Other inconsistences might be marked; but we think his general argument, that all epidemics or diseases affecting large parts of the community, and diffusing themselves over various and distant countries, owe their origin to an altered state of

the

the atmosphere, to whatever cause we may assign that alteration, is just. The fatality of such fevers, the author acknowledges, may be heightened by local causes, crowded, narrow, and ill-ventilated houses, streets, &c.

The author then treats of the best means of securing ourselves against pestilential infection; these, he very properly suggests, consist in strengthening the constitution and preserving the general health; in early rising, in cleanliness, exercise, and a proper diet; in choosing dry and well-ventilated spots for our habitations, well supplied with sweet and wholesome water; in wide streets, and spacious apartments; in carefully removing all sordes, &c.: he censures his countrymen for neglecting these precautions, and points out to them situations and modes of building, that would, he thinks, in a great measure have guaranteed them from the extreme violence of the plague.

The work concludes with observations on the lunar influence; but we have already extended our review of this article beyond our usual bounds: we shall therefore refer our readers to the work itself, from the perusal of which we can promise them much amusement and information.

---

ART. V. JOSEPHI CAVANILLES, *Icones et Descriptiones Plantarum quæ aut sponte in Hispania crescunt aut in Hortis hospitantur.* Madriti. 1799.

AMONG the ancient botanists who have ranged through Spain to seek for indigenous plants, we ought above all to distinguish Ecluse and Barrallier; but their descriptions, which do not mark exactly all the parts of fructification, exhibit the infant state in which that science then was. After them came Loëfling, and botany had then made a great step towards perfection: but, besides that Loëfling observed and published only a small number of plants of this country, he often leaves many parts of his descriptions very defective; and which also,

except five or six, are not accompanied with any engraving to supply the defects in what he has omitted.

Spain at this day possesses many enlightened botanists, who, full of zeal for the science, not only study the plants of their own country, but undertake journies and voyages into distant parts, to observe their vegetable productions. Cavanilles is of this number. Wishing to extend his knowledge, and profit by the information obtained before his time, he travelled into France some years ago, and was there caressed by some of their most celebrated botanists, who generously opened to him their books and their herbals. It was during his abode at Paris that he published his first work, entitled "Dissertations sur les Genres Monodelphies;" that is to say, the genera of plants in which the filaments of the stamina are united in one body. There were ten of these dissertations; the first eight of which were printed at Paris, and the two last at Madrid. After an absence of ten years, on his return to his native country, Cavanilles conceived the plan of giving a history of the plants which grow naturally in Spain, and which have been transported from the Spanish colonies, and cultivated in the Spanish gardens. The four first volumes of this work are well known in the botanical world; and therefore we shall not speak of them: the fifth has just appeared, and deserves to be noticed at a greater length than our plan will admit.

The plants described in this last volume are full three hundred in number; many of them have been taken from the immense collection of Louis Née, an indefatigable traveller, who in the course of five years travelled over New Spain, Peru, Chili, and the high mountains in those countries: he then visited New Holland, the Philippine, Marian, and Friendly Islands in the South Seas, and many others not hitherto visited by botanists: having afterwards returned to the continent of America, he travelled over the immense plains of Buenos Ayres, from Monte Video beyond that of Mendoza, exa-

mined the high mountain of Chimboraza, and that of Tunguragua, not less celebrated, the environs of which have just been ravaged by a dreadful earthquake; then directing his steps for Guyaquil and Panama, and the port of St. Blaise, he returned by another route to Monte Video, where he ended his travels. It may be conceived how many curious and scarce productions this man must have gathered, who only travelled to observe nature. Cavanilles reckons the number of his plants at more than ten thousand species, a third of which at least were wholly unknown. In this collection, he says, we may see many of the families of nature extend themselves by new filiations: at first they present ferns, which attract notice by the elegance of their foliage and variety of their fructifications; the compounds afterwards become more numerous and more brilliant: but the grasses and thymes rise superior to all the rest, both by their number and the singularity of their form; they alone are sufficient to occupy the attention of many botanists. The family of the umbelliferous, and that of the cruciferous plants, are not less rich.

The author, in his fifth volume, has described and delineated many new plants from that collection; and in this he has had no difficulty, but to select. This is the list of them: seventeen calciolaria, two sclerias, nine aristida, four stipa, four melica, six convolvuli, four selena, four bauhinia, five passiflora, six sida, eleven mucipsa; to which he has added eleven new genera, making a part of the same collection.

The author consecrates one of these genera to the memory of Sellier, an able artist of Paris, who has engraven the plants described in his Dissertation on the Stamina Monodelphia. Another bears the name of Paulet, a distinguished physician at Paris, who has published, in the Memoirs of the Medical Society, an interesting dissertation on champignons. These plants will preserve the remembrance of two men, one useful in the fine arts, the other to humanity: but what need was there for the same author to dedicate a plant to the memory

of

of one of the destroyers of the human race, the fierce Cortez; which he has named cortesia? What connexion was there between the plants of the new world and Cortez, the man who only viewed them to trample them under his feet, and dyed them with the blood of the victims to his cruel avarice? This might have been allowable if the plant had possessed evil properties, were venomous, or destructive to man or animals.

This work is printed with great care: it contains a vast number of figures, designed by the author, and engraved with much judgment. The plants are inserted without any systematic arrangement, but at the end of each volume is a table, wherein they are arranged according to the system of Linnæus, which greatly facilitates the finding them. The descriptions are clear and methodical; they point out the native place of the plants, and the time of their flowering.

We shall end our account of this work by speaking of an event foreign to the general purport; but which is related in the preface to the fifth volume. It is the detail of a dreadful earthquake which happened in the kingdom of Quito, when Louis Née, the traveller cited by Cavanilles, was in that country; and is thus related:

Ever since 1791, in the environs of Mount Tunguragua, many subterraneous noises had been heard, and a violent fermentation seemed to reign in the interior of the mountain, from the sides of which, covered with lava, flames and thick vapours issued through chasms. These alarming symptoms announced some great event, and spread terror all around. In fact, on the 4th of February 1797, about eight o'clock in the morning, the summit of Tunguragua was more serene than ordinary; when suddenly the mountain trembled, by the efforts of subterraneous fires, opened, and communicated to the surrounding earth a most dreadful motion for four minutes, which was felt to an immense distance. In a moment many towns were overthrown; some, as Riobamba, Quero, Pelileo,

Patate, and Pilaro, were buried, with all their inhabitants, under the ruin of the mountains: others, as Hambato, Latacuga, Guaranda, and Alausi, were almost entirely destroyed: others were damaged in different degrees by the chasms which opened in the mountains, or by the overflowing of the rivers; and in this great calamity above sixteen thousand men perished. This first shock was followed by two others in the same day, and each time attended with dreadful noises. The earth continued to be agitated at intervals during the months of February and March; but on the 5th of April the shocks were so strong, that they were alone sufficient to effect all the destruction above mentioned.

These shocks were felt from east to west, from the sea as far as the river Napo, a space of one hundred and forty leagues; and from north to south, from Popayo to Piura, they extended for a space of one hundred and seventy leagues. All the country in the centre of that space was completely overturned, and a region formerly so fertile and well peopled was now become a heap of ruins. Other attendant disasters served also to complete the misery: the land sinking, opened in various places, and presented horrid caverns; the summits of the mountains were precipitated into the plains, and from them issued a liquid and infectious matter in such immense quantities as to fill many deep vallies, and bury the houses with their inhabitants. This matter, either mixed with the sources of the springs, or hardening like stone, stopped the courses of the rivers, the waters of which, for eighty-seven days, transformed the whole country into an immense lake.

Many remarkable phenomena presented themselves during this catastrophe; two of which are particularly worthy the attention of philosophers. When the earth began to quake, the lake Quiritoa, situated near the town of Insilva, in the district of Latacanga, was suddenly inflamed, and such a heat issued from it, that all the flocks and herds in the vicinity were suffocated.—Near the city of Pileo there was a very elevated

vated mountain which trembled for a moment, and a river of fetid water rushed out, which overwhelmed the town called Lamoya, and all its inhabitants.

What a vast field for observation do those ruins afford! but they must be contemplated on the spot. We learn that M. Humboldt has obtained the King of Spain's permission to travel into this desolate country; and from the sagacity of this eminent philosopher, we may expect interesting details on this very important event. *L'Espr. des Journ.*

---

ART. VI. *Observations on Mr. Simmons's Detection, &c. &c. with a Defence of the Cæsarean Operation, derived from Authorities, &c. &c. a Description of the female Pelvis, an Examination of Dr. Osborn's Opinions relative to Embryulcia, and an Account of the Method of Delivery by Embryotomy. Parts I. and II. illustrated by numerous Engravings.* By JOHN HULL, M. D. Member of the Corporation of Surgeons, and of the Physical Society of London; of the Natural History Society of Edinburgh; and Secretary of the Literary and Philosophical Society of Manchester. Octavo. 484 pages. BICKERSTAFF, London. 1800. Price 9*s.*

IT is with no small reluctance we enter on a review of this work, which serves to keep alive a contention that ought long since to have ceased, and to agitate the minds of the public upon a subject which should not be brought before them but with the greatest tenderness.

The case of Elizabeth Thompson has been amply detailed (See our Number for June last) and repeatedly discussed; and the opinions of the practitioners who have seen the pelvis, or the casts from it, are decisive as to the impracticability of delivering that poor woman by any other means than by the Cæsarean section: and in that decision the main question, whether cases do not sometimes occur in which it is

necessary

necessary to perform the operation of hysterotomia, or, in other words, whether the pelvis in women be not sometimes found so much contracted and deformed as to render it absolutely impracticable to extract a full-grown fœtus through it with the crotchet, was so completely determined as seemed to preclude the necessity of further discussion. We shall pass over therefore all that part of the present volume which relates to the case of Elizabeth Thompson, or to the general question, whether it be not sometimes necessary to perform the Cæsarean section. In the course of our author's discussion of this question, he brings additional proofs, not only that large wounds of the uterus are not necessarily fatal, but that women have survived the entire loss of that viscus. A curious case of this kind is quoted at length, as related by Professor Weisbourg of Göttingen, and published in the eighth volume of the Comm. Reg. of that place, for the year 1787. A similar case has been since given by Mr. Alexander Hunter, Surgeon of Dumbarton, and noticed in our Review for May last. The author next considers the case of Elizabeth Sherwood, published by Dr. Osborn, at first with his Observations on laborious Parturition, and afterwards in 1792, in his volume of Essays on the Practice of Midwifery, &c. As the pelvis in this woman was exceedingly contracted and distorted, measuring less than two inches in its largest diameter, and the Doctor had been able to extract a fœtus of a large size through that cavity; he indulged a hope, that few cases could occur in which, by patience and perseverance, the fœtus might not be brought by the natural passage. Indeed, he seemed to think it a physical impossibility that a woman should enjoy all her faculties, be capable of conceiving, nurturing, and bearing a child to its full term, without having sufficient capacity in the pelvis to admit the passage of a fœtus of full growth through it. "I am inclined to believe," he says, p. 469, "that the necessary organs cannot be so constructed as to permit conception to take place, and gestation

to proceed to its completion (while the other functions are going on) where the pelvis is so deformed in shape, and so contracted in capacity, as not to allow of a child's being extracted through the natural passage by the crotchet, in a putrid and reduced state." This opinion, which the Doctor's success in the case of Elizabeth Sherwood seems to have inspired, is so evidently erroneous and ill founded as not to deserve a serious answer. We shall, therefore, again pass over our author's observations upon it, as well as his strictures on the case that gave birth to them, both as that case is now known to every one it can concern, and as he has been anticipated in his remarks by the author of Observations on human and comparative Parturition, published by Johnson, in the year 1794. In that work, the writer, Dr. Bland, has also combatted with success, we think, various other points of doctrine, inculcated in the Essays on the Practice of Midwifery, and which are here considered.

Having proved that the operation of hysterotomy may be sometimes necessary, and described what he regards as the most eligible way of performing it, the author proceeds to enumerate the causes or accidents that may call for its performance. These are, contraction or deformity of the pelvis, whether original or existing from the birth, occasioned by rickets during childhood, or by malacosteon at a more advanced age.

Malacosteon, the author observes, p. 192, denotes that softness in the bones which takes place in the adult state. This disease is sometimes, though rarely, general, affecting almost every bone in the body, as in the two very remarkable cases of Madam Soupiot, related in the second volume of Bromfeild's Surgery, and of James Stevenson, of which we have an account in the fifth volume of Medical Observations and Inquiries. "Upon other occasions it is found to affect the bones of the pelvis only, or the spine and pelvis together; at least its effect upon the other bones in these cases is not evident.

evident. This partial affection is not an uncommon occurrence, and the degree of deformity or contraction of the pelvis, induced in consequence of it, is frequently found to be much greater than has ever been observed to be occasioned by rickets. The degree of softness, which takes place when this disease affects the pelvis and spine, is very various; sometimes a very small portion only of the phosphate of lime appears to have been removed, the bones retaining their usual appearance, and nearly their usual hardness; upon other occasions, the bones become of a cartilaginous consistence, or even softer, and will admit of being cut with a knife; as in the case of Mary Ordway, which occurred to Mr. Welchman, and the case of Mrs. E. Forster, which is related by Dr. Cooper.

"Seven cases," the author adds, "of such extreme deformity of the pelvis from malacosteon, as to require the performance of the Cæsarean operation, have occurred in Manchester, within the remembrance of the present practitioners; and one has occurred within this month, where the pelvis is become so contracted as to render the crotchet necessary."

Other causes that may render the operation of hysterotomy necessary are wounds, ruptures, or lacerations of the uterus or vagina. In these cases, the author says, we should universally, and as early after the accident as possible, endeavour to turn the child, and bring it by the feet; but if the pelvis of the woman should be so narrow as not to admit the hand to pass the brim, it may be necessary to open the abdomen and extract the child that way. Various other affections are mentioned, which oppose obstacles to the birth of the child by the natural passage; as hernia of the uterus, scirrhous tumours of the neck of the uterus, coalescence of the sides of the vagina, or of the os uteri, enlarged ovaria, &c.

"A case of difficult labour, arising from an enlarged ovary (which was five or six inches in length, and one and a half in thickness, and of a steatomatous nature, but contained some hair, and nine teeth,) is related by Baudelocque. It was mistaken

for

for a projection of the os sacrum, and the Cæsarean section had been proposed by one of the accoucheurs who attended. Baudelocque advised the turning of the child, which was put in practice; but both mother and child died. He advises us, in such cases, to push up the ovary above the edge of the fossa iliaca. Two cases of diseased and enlarged ovaries occurred to Dr. John Ford. In the former, the tumour, which was large and firm, and situated between the rectum and vagina, filled up all the concavity of the os sacrum, and a considerable share of the cavity of the pelvis; and it was judged necessary to deliver by opening the head of the child. The mother died at the end of three weeks; and the body being opened, the tumour was found to be an encysted dropsy of the ovarium, in which there was a considerable quantity of hair. In the latter case, which, in all its circumstances, resembled the former, a trocar was pushed through the posterior part of the vagina directly into the tumour, which subsided in consequence of a large discharge of water, and a living child was born without any farther assistance. This patient recovered from her lying-in; but became hectic some time after, and died about the end of six months. Her body was not examined."

In these cases it is rarely necessary to have recourse to the Cæsarean section; neither will it be admitted in cases of epilepsy and convulsion, of wrong presentation, or monstrous conformation of the fœtus; although these are enumerated by our author as causes that may, under very peculiar circumstances, particularly when joined with deformity of the pelvis of the woman, require to be remedied by that operation. The author concludes this section with a tabular account of cases in which the Cæsarean operation has been said to have been performed, extracted from the works of Rousset, Bauhine, Simon, Lauverjat, Eysold, Baudelocque, Richter, &c. From this account it would seem, that of one hundred and fifty-five women, upon whom the operation had been performed,

one hundred and twelve had survived, and forty-three only died. Of the women who survived, several are stated to have undergone the operation five, six, or more times.

It is to be lamented, that a gentleman who is evidently not deficient either in knowledge or industry, should rest his defence of the operation he means to patronise upon such weak and incredible evidence. In far the greater number of these cases, the authors from whom the accounts were taken, neither performed, nor were present at the operation; they are given upon mere hearsay evidence. Rousset indeed tells us, he had ocular evidence; but what he calls ocular evidence, is not always being present at the operation, as we might suppose, but examining the cicatrix, and having the account from the woman or her neighbours. For a full refutation of many of these cases, we shall refer our readers to an ingenious paper on the subject, by Dr. Haighton, published in the Medical Records and Researches.

"Writers differ," our author says, p. 294, "considerably with respect to the most proper time of performing the operation; but, as I do not think it necessary to adduce the opinions of each, and to examine the reasons they have assigned, in support of them, I shall content myself with stating my own sentiments upon this point.

"As a large effusion of blood into the cavity of the abdomen, after the Cæsarean operation, may excite dangerous symptoms, and as the extravasated blood is chiefly lochial, it is a material consideration that there should be no impediment to the discharge of the lochia per vaginam, from the contracted state of the os uteri. It is, therefore, advisable, if the liquor amnii be not discharged, and the os uteri can be reached, to defer the operation, till this be dilated to the extent of about an inch and a half in diameter. And, when this dilatation has taken place, I am of opinion, that the operation ought to be immediately performed; lest the membranes should burst. For, when an incision of five or six inches

inches in length is made into the uterus, previously to the discharge of the liquor amnii, it will be sufficient for the extraction of the fœtus and secundines; and yet will constitute a much smaller permanent wound than one of the same extent, made into the uterus, after the discharge of the waters; and consequently will be less dangerous, and less likely to allow of the effusion of the lochia into the abdominal cavity. And, since the strength of the patient, except where she is suffering from previous disease, and the contractile power of the uterus, will, at this period, scarcely be impaired, I have no doubt, but the proper contraction of this organ will take place, notwithstanding the suddenness of the depletion. But if the liquor amnii should be discharged at the beginning of the labour, and the os uteri should dilate slowly, or if no part of the uterus be within our reach, I am of opinion, that the operation should be performed as soon as possible, after the necessity of it has been established by a consultation; lest the child should die, or lest the uterus should be irreparably injured by being strongly compressed betwixt the cranium, or other presenting part of the fœtus, and the projecting parts of the pelvis of the mother; a circumstance, which may take place in less than twenty-four hours, where the pelvis is much distorted, as is proved by the dissection of Eliz. Thompson, and by the case related by Dr. Garthshore."

On this passage we shall observe, that where there is sufficient space to admit a finger or fingers, to dilate the os uteri to the extent of an inch and an half, as the author recommends, it will not be found very difficult to open the head of the fœtus, and extract it by the natural passage. In the case of Elizabeth Thompson, no part of the child, or of the uterus, could be perceived.

The author renews his inquiry into the best mode of performing the operation, and concludes, that the incision of the uterus ought to be made in its fundus, or the highest portion of its body; and that it ought to be made in a transverse or

slightly oblique direction, rather than longitudinally, and on one side of the abdomen, and not in the linea alba.

" I am induced to give the preference," the Doctor says, " to a transverse or slightly oblique incision, continued through the integuments and fleshy parts of the abdominal muscles into the fundus, or upper portion of the body of the uterus, because there is less danger of wounding the intestines and bladder (more especially when the latter cannot be emptied by the catheter;) and because extensive ventral herniæ are not so liable to take place, when the operation is performed in this manner, as when the external incision is made in the linea alba. I am likewise of opinion, that the wound should be made with a very sharp knife, because wounds that are made with blunt instruments, do not heal so expeditiously; and that the incision of the uterus should be made very quickly, lest a violent contraction of this organ should take place, before it is completed, aand produce a laceration. Those who have suggested, that the uterus ought to be divided by a blunt instrument, seem to forget that the hæmorrhage, during the operation, is rarely if ever so profuse as to be dangerous; and that the extravasated blood, found, on dissection, in the cavity of the abdomen, is principally lochial."

In the management of the wound, he seems to recommend sewing the uterus, in which case the end of the ligature should be left hanging out of the external wound. " I am also of opinion," he adds, " that the abdominal wound should be accurately closed by the interrupted, quilled, or glover's suture, from one extremity to the other, without leaving any aperture for the discharge of extravasated fluid," which he thinks will generally be absorbed without doing mischief to the patient. He attributes the superior fatality of the operation in this country to what it is represented as being on the Continent, to the delay that generally takes place before it is determined on; in which time inflammation of some of the abdominal viscera will be found generally to have taken place, which would have destroyed

stroyed the patient, even although no operation had been performed. The author lays down sufficiently judicious rules for the subsequent treatment of the woman through the cure, and then proceeds to give an history of the operation as practised on the dead female, with the view of saving the life of the child: but as no one ever doubted the propriety of performing it in these cases, we shall not detain our readers by citing any of his observations on this subject, only in general noticing, it ought not to be long deferred; as it is probable that, by the end of fifteen or twenty minutes after the death of the parent, the child will be irrecoverably gone.

The author again enters into a long examination of certain practical points in Dr. Osborn's Essays, which he censures with no little asperity: but in his observations here, as well as in the former part, he has been anticipated by Dr. Bland, in the publication before referred to; and these being, as we apprehend, generally known, need not be here repeated.

A variety of experiments are detailed by the author, undertaken with the view of ascertaining the smallest cavity through which a full-sized fœtus could be extracted with the crotchet. As it is impossible to decide with precision what the actual size of the pelvis is in the living subject, we see little practical use to be derived from these experiments. They also disgust, by their perpetual reference to the case related by Dr. Osborn, our author not admitting that the pelvis of Elizabeth Sherwood was so contracted as the Doctor has described it.

We cannot dismiss this article, which contains much useful matter, without expressing our wish that the future publications of the ingenious and intelligent writer may be divested of the numerous personalities which deface the work before us and deprive it of a large portion of the value it might otherwise possess to his brethren.

ART.

ART. VII. *Memoires de l'Institut National des Sciences et Arts. Sciences mathématiques et physiques. Tom. II.* Quarto. Paris. Fructidor, An VII. Imported by DE BOFFE. Price 1*l.*

THIS volume furnishes but a small number of medical articles; some of these, however, are sufficiently valuable to merit notice in our Review. (For an abstract of the medical papers in the former volume, see our Number for July.) The first, containing an account of the appearances in the stomach and bowels of a woman who died in consequence of taking a large quantity of opium, communicated by Pierre Lassus, we shall give entire.

A woman, aged 60, who for many years had been troubled with occasional fits of melancholy, swallowed six and thirty grains of opium in the middle of the night. Five or six hours after, she was found in a deep and profound sleep, breathing with stertor, like a person in apoplexy. She revived, however, for a few moments at a time; and in those intervals informed the attendants what quantity of opium she had taken. Some ipecacuanha was given to her, but without exciting vomiting; they then made her swallow, though with difficulty, some spoonfuls of vinegar and water. At this time the author, with Citizen Fourcroy, visited her. She had now no knowledge of any thing that passed about her, or shewed the smallest sign of sensibility. Her respiration was loud and laborious, her skin warm, her pulse quick, the pupils of her eyes considerably dilated; her joints were flexible, and the muscles of the whole body in a state of relaxation. She died ten or eleven hours after taking the opium.

On opening the body, the whole internal surface of the stomach appeared to be inflamed; but it was in no part eroded. The inflammation was extended through the whole of the small intestines, on which there appeared large gangrenous patches of a greenish colour. In the cavity of the stomach were found five or six spoonfuls of a turbid fluid, of a reddish colour; it was the vinegar mixed with the ipecacuanha,

cuanha, the mucus of the stomach, and, we suppose, the opium, which was so completely dissolved, that not the smallest particle of it could be collected.

The small intestines were flaccid, and lying on one another; the cœcum and colon distended with flatus; the rest of the abdominal viscera, as well as those of the thorax, were in a sound and healthy state, excepting that three large-sized stones were found in the gall-bladder, although the relations of the deceased were not conscious she had ever made any complaint that could be attributed to that cause. The blood contained in the cavities of the heart, and in the large vessels, was of a blackish colour and congealed, as it is usually found in those parts. The brain was in a healthy and sound state, and the vessels not over-distended with blood, neither was there any serum in the ventricles. In a word, all the diseased appearances were confined to the stomach and the small intestines.

It follows from hence, the author remarks, 1st, That opium taken in large quantities does not produce a true apoplexy, that is, it does not occasion a congestion of blood in the vessels of the brain: 2d, That the earlier it is dissolved in the stomach, the greater is its activity, producing by irritation inflammation, speedily degenerating into gangrene: 3d, That the vegetable acids, recommended by practitioners as antidotes against the poison of opium, are only efficacious in that way, when the opium has been taken in small quantities.

The second medical paper in this class contains an account of the number of persons affected with calculi in the urinary passages, admitted into the hospital at Lunéville.

At Lunéville, in the department de la Meurte, the author says, there is an hospital founded for the reception of patients affected with urinary calculi. Sixteen hundred and twenty-nine patients have been cut for the stone in the hospital since the time of its institution, that is, within the space of about forty years. Of these, fifteen hundred and sixty-four were of the male, and only sixty-five of the female sex.

The

The number of females to the males, therefore, was as one to twenty-four. One hundred and forty-seven, that is, about one in eleven of the patients died. The operation was performed, we are told, by a variety of surgeons, and by different processes; and the mortality was greater in the early part of the time than it has been of late, since the surgeons have become more expert in the art.

Citizen Saucerotte, associate of the Institute, to whom the public are indebted for this account, has given tables or lists of the patients, shewing their ages at the time they underwent the operation.

From these lists it appears, that three hundred and ninety-seven of the male patients who underwent the operation, were from one year and an half, to five years of age; five hundred and eighty from five, to ten years of age; two hundred and fifty-seven, from ten to fifteen; and one hundred and forty-two, from fifteen to twenty years of age: so that thirteen hundred and seventy of the fifteen hundred and sixty-four male patients were under the age of twenty-one years; of the remainder, eighty-nine were from the age of twenty to thirty; thirty-five, from thirty to forty; thirty, from forty to fifty; eighteen, from fifty to sixty; and the same number from sixty to seventy. Among the females, fifty of the patients were under fifteen years of age, the remaining fifteen were from fifteen to fifty-four years of age—the oldest female who appears to have undergone the operation. This comparative exemption from one of the most tormenting complaints afflicting the human body, arises from the urethra in women being shorter and more easily dilatable in them than in men, whence the stones are discharged before they have attained such a bulk as to require the operation; but we are afraid this advantage is more than overbalanced by numerous uterine affections to which the sex is subjected.

We will add the following extraordinary case, of an uncommon enlargement of the bones, communicated to the Institute

stitute likewise by Citizen Saucerotte, although we think it should have been verified by the names of other professional persons.

A man of a middle stature, when he was 33 years of age, we are told, about the year 1766, perceived all the bones of his body, except his teeth, gradually becoming thicker, but without increasing in length. By the end of six years, during which time they continued enlarging, they had acquired nearly double their ordinary bulk. The muscles and fleshy parts, without increasing in size, became soft and flabby; the bones of the cranium were so increased, that he was obliged to have his hat made expressly for him, none being found of sufficient size to cover his head; the eyes, from the increased thickness of the orbital bones, were nearly thrust out of their sockets; the ribs rode over one another; the sternum, clavicles, and shoulder-blades, stood unusually prominent; the flexibility of the joints was diminished, so that all motion was performed with difficulty.

No cause could be assigned for this extraordinary disease. Before the commencement of the complaint, the man ate his food with a good appetite, and his employment being in the field, he had always been accustomed to take a large portion of exercise.

During the time the bones were increasing he became dull, and almost incapable of motion; his breathing was difficult and laborious; his pulse small, and scarcely perceptible; he was affected with pains like to the rheumatism in all his limbs; his urine was whitish, thick, and deposited a sediment like mucus. At the end of six years the bones ceased increasing, the pains in his limbs abated, and his respiration became more free. The year following, viz. July 1773, he died, after experiencing, for two or three months, complaints similar to those which had attended while the bones were increasing in their bulk. If the ribs, sternum, vertebræ, and bones of the pelvis, projected internally in the same proportion

as they did without, they would press upon the viscera, impede their action, and at length destroy life. This could not be ascertained, as the relatives of the patient could not be prevailed on, by any entreaties, to permit the body to be opened.

*Memoir on the Motion of the spinal Marrow.* By Citizen Portal.

The author observed in a spina bifida, in a child, which was situated in the upper part of the vertebral column, a motion of distention and contraction, similar to what Haller and other physiologists have observed in the brain, synchronous with respiration. During expiration the tumour was enlarged, in inspiration it was diminished.

*Memoir on Fractures of the Sternum.* By Citizen Sabatier.

After some general observations on fractures of the sternum, the author gives the history of two cases of fractures of that bone, which came under his care.

A strong, healthy man, of a middle age, was thrown from a loaded carriage, one wheel of which passed over his breast, from the right to the left side. On examination, the sternum, and the two last of the true ribs on the left side, were found to be broken. He voided, almost immediately, a considerable quantity of blood from his lungs, and lay for some time in a state apparently dying. The noise occasioned by the broken edges of the sternum rubbing against each other could be distinctly heard; the lower part, which was separated, moved backwards and forwards during inspiration and expiration. The author attempted, but in vain, to keep the edges of the broken bone in contact with each other; but the pain and difficulty of breathing were so increased by the pressure, that he was obliged to desist, and content himself with putting on a bandage, only sufficiently tight, to keep cloths wetted with an embrocation of brandy and oil upon the part. When the patient had recovered his natural heat, some blood was taken from the arm; and this operation was repeated, we are told, seven times in the three following days.

The

The patient was allowed to sit in the bed, leaning forwards upon a chair placed before him, the only posture in which he could draw in his breath without occasioning intolerable pain. At the end of eight days he was so much mended as to be able to lie down in his bed. He went on improving in his health, and by the end of three months was able to return to his business, though he had still some degree of tightness across his chest, which would probably continue with him through life.

The second case was of a man upwards of 60 years of age; he fell into a pit more than thirty feet deep, and was found lying on his back. On examination, the lower part of the sternum was found separated from the upper, and pushed under it for the space of half an inch. He died on the eighth day from the time of the accident. The author had proposed trepanning the sternum, in order to restore the lower part to its proper situation. On opening the body, a large quantity of blood was found extravasated under the integuments and in the right lung, which adhered to a considerable extent to the pleura. As there was no appearance of bruise on the skin of the breast, and the man was found lying on his back in the pit, the author thinks this an incontestable example of a counter-stroke of the chest, that is, where the fracture or injury happens on the opposite side to that on which the stroke, or blow, is received.

*Observations on a Species of Fever frequently prevalent in France during the Autumn, and which has been, and continues to be particularly fatal in the Department of La Vendée.* By Citizen Portal.

It is now more than two years, the author says, since he had the mortification to see a great number of the soldiers returning from La Vendée to Paris, affected with a fever of so dangerous a nature, that far the greater part of them perished, especially those who had not been properly treated in the commencement of it; on which account

he determined to put together such observations as had occurred to him on the nature of the complaint, and on the treatment he had found most successful in its cure. He relates the cases of three of the patients who died of the complaint, with the appearances that were observed on dissecting their bodies. The fever appears to be of the hectic kind, and to take its origin from obstructions in some of the viscera; the mesentery, liver, or lungs, being one or all of them found indurated and enlarged. Water was lodged in the pericardium, thorax, or abdomen, and the patients all died extremely emaciated or consumptive. The remedies the author found most effectual in combating the disease, and which, he says, when administered early, usually prevented the hectic state, and cured the patients, were gentle vomits, which were indicated by the nausea constantly attending, with loss of appetite. These were repeated every four, five, or six days, interposing mild cathartics, and bitters, until the patients were cured.

*On Small-pox complicated with Tetters, and on the Advantages derived from giving Preparations of Mercury through the whole Course of the Small-pox.* By Citizen Desessartz.

We have not yet, the writer says, adopted in France the method pretty generally followed in England, of giving preparations of mercury in the small-pox, whether inoculated or natural. Two of the author's patients who were severely affected with tetters, for which he was administering Bellost's pills, were seized with small-pox. The pills were continued; the small-pox, in both the patients, went through its course in a regular and easy manner, the pustules maturated in the usual time, and the children soon recovered from that complaint; but no alteration took place in the appearance of the shingles, which were not completely cured until near two months after.

*Observations on the Effects of the Bite of mad Dogs on the human Species.* By Citizen Sabatier.

In the year 1784 the author communicated to the Academy

of

of Sciences at Paris the case of a man who had been bitten in various parts of his body by a mad dog. The wounds were deeply cauterized with the muriate of antimony, kept discharging some weeks, and at length suffered to heal. The man was never affected with any complaint in consequence of the bite. Since that time the author has had one other opportunity of using the caustic, and with similar advantage. The subject, a young man, was bitten in several parts of one of his legs by a dog supposed to be mad. The caustic was applied as in the former case, and the patient remains free from complaint. It is remarkable, the author neither mentions the time when this patient met with the accident, nor the circumstances that induced him to believe the animal that bit him was mad. The author adds notices of nine other cases that had fallen under his care prior to the year 1784. In two of these he took off, from the one, the first joint of the fore-finger, from the other, the first joint of the thumb. These persons remained free from the rabies; but as they neither of them believed the dog that bit them was mad, no inference can be drawn from their cases. The two following cases offer something more to the purpose. Two soldiers were bitten by the same rabid animal—one on his breast, the teeth of the dog passing through his coat, waistcoat, and shirt, the other on his face and head. The author applied the caustic to the wound on the breast, but only used common dressings to the wounds on the head and face, not thinking it safe to apply the caustic to those parts. The patients were both conveyed to the sea-coast and dipped, used mercurial ointment several days after they returned, and took a variety of medicines internally. The man who had been bitten in the breast, and whose wound had been treated with the caustic, remained free from complaint; the other, whose face and head had been bitten, and whose wounds had been dressed with simple ointment, was seized with the rabies about seven weeks from the time he received the accident, and died. But these cases are

by no means conclusive of the advantage of the caustic, the teeth of the dog being probably freed from the poison by passing through the belt (la bandouliere de son fourniment) and the thick clothing of the soldier.

We shall give the result of the author's observations on the cases of three of his patients who died rabid.

The disease made its appearance at different periods, from the time the parties received their wounds, viz. in one on the thirty-seventh, in the next on the fifty-second, and in the third on the eighty-fourth day. The wounds in none of these cases became inflamed or painful on the approach of the disease. The death of the patients also happened at different periods; one lived five days, the second sixty hours, and the third only forty-two hours from the time of the attack of the disease.

*Remarks on the Operation of cutting for the Stone with the concealed Bistory; and on the Opinion given by the Academy of Surgery at Paris on that Operation, in the third Volume of their Memoirs.* By Citizen Sabatier.

An engraving of the instrument which is here named *lithotome caché*, accompanied with observations on its use, may be seen in the latter end of the third quarto volume of the Memoirs of the Royal Academy of Surgery. M. Sabatier had frequently given his opinion on this subject, in his surgical lectures, and now submits to the Institute, and the medical public, some farther remarks. He thinks that the instrument in question obtains all the advantages which can be derived from the lateral operation of lithotomy; and that, in judicious hands, it performs its part with the greatest possible facility. Till the year 1748, the author remarks, when the *lithotome caché* was introduced, nearly all the French surgeons practised either the greater apparatus, or something very similar.

The principal objections which have been advanced against its general use are, 1st, A faulty exterior opening; 2d, Too wide

wide an incision of the bladder; 3d, The possibility of cutting the rectum: 4th, The uncertain effect of the instrument.

As to the first objection, M. Sabatier observes, that the bad consequences which have arisen from the external cut being made too high, can never take place, unless the surgeon deviates from the rule originally prescribed by the inventor of the instrument; which is, that the bistory should be plunged into the perinæum by the side of the raphe, near the centre of the left accelerator muscle, and a little posteriorly under its middle, so as to descend obliquely towards the tuberosity of the ischium on the same side.

Cases have been adduced, in which the incision into the bladder, made with the *lithotome caché*, has exceeded the proper limits, and produced fatal hæmorrhages. M. Sabatier admits the fact: but he says, this has happened from bad management, and not from any fault in the construction of the instrument; which, when properly used, cannot be productive of greater mischief than is common in the lateral operation.

The possibility of dividing the rectum, the author is of opinion, has no ground as an objection against the concealed history. This accident has happened, indeed, twice; but in one instance the calculus was unusually large, and the *lithotome* was opened to its fullest extent; whereas, the inventor never used it in that state, so far as appears from the account he published of his operations. Besides, this same accident has occurred to Cheselden himself, and perhaps to many other celebrated surgeons.

The inventor had too unguardedly boasted that his instrument would invariably cut with the same precision as a pair of compasses would describe a circle, according to the diameter of its opening. But the Royal Academy observed that, admitting this to be absolutely true, it was relatively false; because the dimensions of the urinary bladder were not the same in different subjects, nor in all circumstances; and this viscus being often contracted by the presence of the stone,

the

the same parts would not be always divided. No great stress ought to be laid on the absolutely invariable operation of the instrument, since the least inclination of the handle, and the variable depth to which the bistory is carried into the bladder, must give very different incisions.

This memoir is extended to twenty-three pages; and contains, in addition to the observations on this instrument as it was first constructed, some ingenious hints for its improvement; with remarks on the necessity of dressings after the operation of lithotomy, and a comparison between FRERE JACQUES and FRERE CÔME, the latter of whom was the original inventor of the *lithotome caché*.

The volume before us likewise contains several chymical and physical papers deserving of attention; but we do not think, upon the whole, that so much discrimination and research are displayed in the Memoirs of the National Institute of France, as were obvious in the Transactions of her late Royal Academies.

---

ART. VIII. *Memorial concerning the present State of military and naval Surgery. Addressed, several Years ago, to the Right Honourable Earl Spencer, First Lord of the Admiralty; and now submitted to the Public.* By JOHN BELL, Surgeon, of Edinburgh. Octavo. 42 pages. LONGMAN and REES, London. 1800. Price 1*s.* 6*d.*

THE medical departments of the navy and army should be filled by men of a liberal education, of general knowledge, and of tried skill in the respective branches of their profession. Too commonly, however, it happens that the public service is performed (or rather neglected) by unfit persons, who, through favour or connivance, get admission into the most important posts that can be allotted them. To remedy such melancholy abuses, the author proposes the institution of a *National School* for

for naval and military surgeons, which he thinks "would be more effectual in preserving the lives of our countrymen, than all the hospitals, civil or military, that have ever been endowed; it would be an institution humane, charitable, and useful, above all others; it would be an object almost of national gratitude. A school of military surgery would make heads as well as hands; it would infuse energy into the duties of every hospital, and would give due effect to the expenditures of government; it would breed men worthy of being employed, and would receive them again after their return from foreign service. Such an institute would become a society, not of schoolmen and theorists, but of men who had mixed with the world; who, after having been absent on service, would return to the school to perfect their studies, and to consolidate their knowledge! There the army and navy surgeons would find opportunities of reading, dissecting, conversing on medical subjects, and would meet unexpectedly with friends from all quarters of the world, endeared by the recollection of former services and hardships, and still more by present pursuits. A national school would thus become a point of conflux for many streams of knowledge; it would be a place of study as well as of teaching; it would be a busy centre for the medical department, and would give government a command, at all times, of men thoroughly qualified for every line of service."

Every branch of our profession is separately and carefully taught, the author observes, except military surgery. "When a young man enters into the navy, his education is but ill begun, and cannot improve. He is put down into a hole, there to remain for years; he is deprived of all communication, of all desire of knowledge. To breathe the vital air, he must live in the promiscuous conversation of a ward-room. Politics, history, anecdote, news, every thing is heard there but that which interests him most, his profession! His youthful ambition is dead; his profession is forgotten; his first

proud feelings, which sprung up with the first dawnings of knowledge, are buried there; his mind is vacant and powerless, 'and all his precious hours are running down to waste.'

"To the life of a navy surgeon there are, God knows, no seductions! nothing, as it now stands, can drive a young man into such a service, but want of education, or want of friends; nothing can support him, even for a short term of years, through the labours and difficulties of this way of life, but a love of his profession, and a sense of duty above all obstacles; hardly can any thing retain him in a service so little honoured or respected; indeed he never feels himself till he leaves it, returns to school, and begins his education anew! Those very pensions which government has held out as permanent rewards, are but as bribes for such young surgeons to continue their services only in the days of their ignorance, and to retire when they become really fit for service; they complete their education with the accumulated wages of service which they could not perform; when their education is in some degree renewed, when they are fit to be received any where but in the fleet, they prefer the permanent establishment of village surgeon, in some remote and miserable place, to the service of the state; plainly declaring for that profession, to which they have given up the very prime and vigour of their lives, a degree of contempt, which, were it needful, I should never be able to express.

"Perhaps," adds the author, "in a whole fleet there are few surgeons mates, possibly not one, who is able to perform the greater operations of surgery. It has happened, that, after the most earnest entreaties of the officers, of the surgeon, of every one concerned, a ship of the line has gone into battle without one assistant on board! no, not one to screw a tourniquet, to tie an artery, to hold a shattered stump, to put a piece of lint to a bleeding wound! Mr. Young, surgeon of the Ardent, was the only medical person on board that ship during the action with the Dutch fleet on the 11th of October. His

His captain was killed the first broadside; and the ship, by repeated explosions, was in great confusion. The carnage was very great; he was not able to perform any operations."

The author points out, in a bold and convincing manner, the necessity which exists for a radical amelioration of our present system; and concludes with a few suggestions respecting the leading points to be observed in the education of military surgeons.

"I. The professor of the military school should teach with perfect care the essentials of anatomy; the great principles of surgery he should found upon his anatomical lectures and dissections; and all the great operations, all the accidents which each part of the body is liable to, all kinds of wounds, should be fully explained.

"II. The general principles of the science should next be applied to the peculiar duties of the military surgeon; the professor of a military school must teach carefully the peculiar nature of gunshot wounds.

"III. He must deliver a short code of military medicine, explaining the fluxes, fevers, spasms, and infectious diseases, and all the peculiar duties of the camp and hospital; and he must explain the scurvy," (the venereal disease,) "ulcers, infections, and all the disorders most frequent in hospitals, in ships of war, or in besieged cities, with detailed histories of the epidemics and plagues which have prevailed during the most remarkable sieges, or which have desolated countries in a state of war.

"IV. He must instruct his pupils in medical geography, in a knowledge of the climates, seasons, coasts of various countries; the manner of conducting soldiers on a foreign expedition, the general care of their health, the choice of encampments, and the forming of hospitals on shore; how to attend an army in the field, how to convert churches, granaries, public buildings, into occasional hospitals, how to lay the wounded in besieged towns, how to carry them off

the field, or how to convey them along with a retreating army.

" V. With these must be taught military economics, diet, general medicine, exercise, clothing, and all methods of preventing disease. Without this knowledge, no man is entitled to serve. How few are thus taught? How few then are fit for service? How few are there who are not conscious of those defects in their general education, which no diligence of their own can ever do away?

" VI. Every pupil of the school, before he were permitted to leave it, should be made to perform, under the inspection of the master or assistants of the school, a regular course of surgical operations upon one dead body; his companions, attending in their places, benefiting by the lessons he gets, and operating in their turns.

" And in the school there should be models and plans of ships, camps, and hospitals; wind-sails and ventilators; waggons for conveying wounded men; beds, fracture-boxes, operation-tables, medicine-chests, and every machine or instrument that may be useful to the military surgeon.

" VII. The last, and not the least important duty of the teacher, should be to point out for his pupils a future plan of study, to make for them a selection of books; to deliver critical and practical observations on those which are to be most used. The teacher should not only instruct his pupils for the present, but select objects for their future study; he should teach them this truth, that he only begins that education which they must complete by their own industry; he must shew them how to think for themselves, and then he may hope to reap in his turn the fruit of their labours, and live to see their observations and cases published under his own care; he might, having himself previously published a regular book of anatomy and surgery, see the maxims of it enforced and illustrated by cases and observations of his pupils; and, working along with them, he might thus perpetuate

the institution, by publishing the works of the military school."

This pamphlet contains many other particulars well deserving the attention of the British Legislature; and although we do not expect to see a speedy accomplishment of Mr. Bell's plan, it is hoped the governors of the new College of Surgeons will cheerfully concur in attempting to remedy the defects here complained of.

---

ART. IX. *Materia Medica; seu Cognitionis Medicamentorum simpliciorum Epicrisis analytica.* Auctore F. SWEDIAUR, M.D. Duodecimo. 510 pages. Parisiis, An 8. Imported by De Boffe. Price 5*s*.

IT is now near fifty years, the author observes, since the first edition of Linnæus's Materia Medica was published. Since that time many plants, then but little known, have been introduced into practice; many of the preparations or compositions of medicines have been improved, and a nomenclature more adapted to the subjects, particularly in chemical preparations, has been adopted.

Having for many years past employed himself in collecting materials for the purpose, in various parts of Europe, the author now offers this work, the result of his labours, to the public. In arranging his materials, he has placed the vegetable and animal productions in alphabetical order, as more convenient and easy to be referred to; the minerals partly in an alphabetic, partly in a systematic order.

Each of the plants are noticed under the following heads, and always in the same order.

First, the systematic name of Linnæus; then the part of the plant used; the class and order under which it is found in the Linnæan system; the duration of the plant, and the places where it naturally grows; the officinal name; every where adding the French, German, English, and,

and, where it differs from the Latin, the Spanish name. Then the physical qualities, and also the principle in which its virtues reside, wherever that has been determined by chemical analysis. Then its medical powers, its use, whether internal or external, and the form in which it is ordinarily given; its dose; and lastly, the preparations into which it enters as an ingredient.

This method, originally introduced by Linnæus, is at once concise, elegant, and very intelligible; and the author has acquitted himself in a manner highly creditable, as will be seen by the subjoined specimens, taken from the three divisions, the vegetable, animal, and mineral kingdoms.

He answers, in a satisfactory manner, some objections he conceives may be made to his plan, particularly to his admitting a great number of articles not generally known, or thought to be of little value. As his book is not written for any particular city, district, or country, but for all Europe, it was necessary, he says, that every thing should be found in it which is in request in any part of this extensive range. There are many plants growing in provinces, at a distance from the capitals, in every country, which have considerable medical powers when used immediately on being gathered; but which become effete and useless, when sent far from the spot where they grew. Hence our judgment on these articles may often be incorrect; at any rate, as they have a degree of reputation in their own country, it was proper to insert them.

He gives the following account of the wild, or officinal valerian:

"VALERIANA *officinalis.* Radix.

"CL. Triand. O. Monog. Perennis; in pratis humidis et sylvis.

"OF. Valeriana sylvestris seu minor. G. Valeriane. GE. Wilde baldrianwurzel; katzenwurzel. A. Wild or officinal valerian. H. Valerian officinal.

"QUAL. Præstans: In oleo volatili residens; odor hircinus; sapor amaricans, aromaticus: Felibus grata.

"VIRT.

" Virt. Eximie antispasmodica; narcotica; anthelminthica; menagoga; diuretica.

" Usus pulv. vel infusi: Epilepsia; hysteria; convulsio; hypochondriasis; hemicrania; amaurosis incipiens; amenorrhœa; vermes; hæmoptysis; ulcus.

" Dosis pulveris cum pauxillo macis: Gran. xx-xxx ter quaterve de die. In infuso aquoso unc. semis-ij ad libram j aquæ.

" Præp. Tinctura; dosi unc. semis-j.

" N. B. Primo vere antequam folia explicata sunt colligenda, cavendum ne ex locis nimis humidis aut tempore anni improprio colligatur, et ne cum radice valerianæ dioicæ inerti confundatur.

" Coccus *(quercus) ilicis*. Nidus cum insecto siccatus.

" Of. Kermes; grana chermes. G. Kermès. Ge. Scharlach-körner.

" Qual. Rubro-tinctoria; odor et sapor gratus, aromaticus, substypticus.

" Virt. Stimulans; adstringens.

" Usus. Anaphrodisia; asthenia nervosa: Hodie potissimum tinctorius.

" Præp. Succus chermes, id est, succus ex insectis vivis in cellula inclusis linteo expressus cum anatica portione sacchari mixtus aut conditus.

" Acidum *nitricum*.

" A. Acidum nitricum concentratum.

" Of. Acidum nitri concentratum. G. Acide nitrique. Ge. Salpetersaeure. A. Nitric acid.

" A. Acidum nitricum dilutum.

" Of. Aqua fortis; acidum nitri tenue; spiritus nitri vulgaris. Ge. Scheidewasser.

" Virt. Antiseptica; oxygenans; diuretica; corrodens.

" Usus. Cachexia; hepatitis chronica; febres et exanthemata atonica; ulcera herpetica? ulcera syphilitica? Externus: Verruca aliæque excrescentiæ; ulcera fungosa, rebellia.

" Dosis.

"DOSIS. Gutt. XL-drachm. iij de die in libr. ij aquæ.

"PRÆP. Acidum nitricum alcoholisatum (vulgo spiritus nitri dulcis); æther nitricus; diversi sales neutri.—Unguentum oxygenatum, ex axungia porcina et acido nitrico fusione paratum."

---

ART. X. *The Institutions of the Practice of Medicine; delivered in a Course of Lectures.* By JO. BAPTIST BURSERIUS, de Kanifeld. Translated from the Latin by WILLIAM CULLEN BROWN. In Five Volumes. Vol. I. Octavo. 549 pages. MUDIE, Edinburgh; ROBINSONS, London. 1800. Price 8*s*.

THIS work having been originally delivered in a course of lectures, will be found to contain not only all that the author thought to be useful, or necessary to be known, upon each of the diseases treated of, but all that had been written and came within the sphere of his knowledge. The reader will, therefore, be often obliged to toil through an immense load of useless lumber before he arrives at the opinion of the author, or obtains the information he is in search of. The translator might then have saved himself much of the ungracious task he complains of, of translating four closely-printed volumes, by making a judicious abridgment, retaining only what was valuable, or little known in this country, or not taught at the University of Edinburgh, for which he seems particularly to have translated it; though one would have imagined, where Cullen had so lately taught, there could be little need of the aid of a German professor. "So urgent," the translator says, "for many months past, has the demand been for this book, in different parts of the country, but particularly at the University of Edinburgh, and so few copies of the original had been transmitted from the Continent, that to supply the deficiency either a new edition of the work, or a translation of it, seemed indispensable." The

The present volume contains: A short Commentary on Inflammation—Of Fever in general—Of the Divisions and Difference of Fevers.——Part I. Of intermitting Fevers—Quotidian Intermittent—Tertian Intermittent—Quartan Intermittent.——Part II. Of continent Fevers—Ephemera—The malignant Ephemera—The Synochus simplex, or Synocha—Putrid Synochus of the Ancients—The slow nervous Fever, commonly called malignant—Hectic Fever.

We shall not attempt an analysis of each of the sections, but give extracts from such parts as seem calculated to afford the clearest idea of the author's doctrine.

"When any part is affected," the author says, p. 3, "with unusual heat, redness, tension, swelling and pain, and, at the same time, an uneasy throbbing is felt internally, it is said to be in a state of inflammation, because its effects nearly resemble those arising from the application of fire. Wherefore, when all or most of these symptoms concur, they evidently constitute the disease called by us inflammation, and by the Greeks φλεγμονή. That its proximate cause is involved in great obscurity, appears, in no small degree, from the very great diversity of opinion which prevails concerning it."

He then gives the doctrine of Hippocrates, Erasistratus, Galen, Ætius, &c. on the causes of inflammation, which he ultimately determines to be excited by stimuli. "But," he continues, "there are many kinds of stimuli, of which, however, only some seem capable of producing it. Neither do these all belong to the class of acrid and caustic stimuli, nor are all those of this kind found adequate to the production of inflammation. *For some of them are considered as almost void of acrimony, whilst applied to certain parts of our body they exhibit the effects of stimuli.* Of this kind is atmospheric air, warm water, the blood itself, and perhaps the nervous influence, if credit may be given to some eminent authors, which cause no sense of uneasiness in other parts, but affect the irritability of the heart in such a manner, that, even in a

state of torpor, it is immediately revived. Certain other substances possess manifest acrimony, and sometimes so great as to seem to burn. But these rather destroy and extinguish than excite the irritable power of the arteries, heart, or any muscular fibre. Such are vitriolic acid, nitrous acid, butter of antimony, lapis infernalis, &c. Some also, although not free from acrimony, prove innocent to some parts, while they irritate and injure others. We have an instance of this kind in the crocus metallorum and cantharides: the former is said to cause scarce any uneasiness to the eyes, but is so pungent and stimulant to the fibres of the stomach as to excite vomiting. The latter, on the contrary, for the most part, have no effect upon the stomach, but act so violently on the kidneys and bladder, that they often give rise to the phenomena of inflammation in these parts. Many other things prove the same fact; but one thing is most certain, that from tartar emetic being infused into the veins, the stomach is affected, and vomiting is excited. When the extract of black anemone is taken by the mouth, it appears that the eyes, particularly, are irritated and inflamed; and, lastly, that there is such an affinity between *them*" (what?) " and the solanum furiosum, or belladona, that a solution, or powder of it, given internally, so contracts the iris, that it seems to be altogether obliterated.

" *Hence it is no difficult task* to define what those kinds of stimuli are by which inflammation may be induced; since, *from certain observations, all of them are not known.* I shall therefore touch on some of them only, concerning the action of which physicians are agreed. It has been imagined by Lancisi and Gorter, that the arteries are lined by a very fine mucus, to defend them against injury from the blood in its passage. But if such a mucus exists, (which is denied by others,) and has acquired acrimony, and adheres to and irritates the coats of the vessels in that part, to a certainty will the irritability be excited, and, of course, the pulsation of the artery will become stronger and quicker. In the same manner,

ner, if this mucus is any where deficient, so as to expose the inner surface of the arteries, and render it more irritable and sensible, the blood, as it passes along, will act as a stimulus there, and increase and accelerate their systaltic motion. This same effect will be produced by any other fluid, which, by its vitiated quality, can corrode or irritate the arteries, or nerves any how belonging to, or communicating with them. Under this head come various acrimonies of the blood, both spontaneous and accidental: excess, or sudden evolution, of phlogiston in any part; its dissipation being checked; the admission of cold air; inspiration of an *epedemic acrid*; and, perhaps, the inflammatory diathesis, as it is called, of the blood itself, whencesoever it be derived."

There is much obscurity and confusion, the reader will observe, in the passages we have quoted, particularly in the parts marked with italics, but whether to be attributed to the author, or the translator, we cannot say, not having the original before us; to the latter, we rather suppose, as we think we see something like the author's meaning. This obscurity prevails in so many parts, that we should tire our readers, as well as ourselves, if we were to attempt to point them out.

Having stated that inflammation is sometimes the consequence of obstruction, the translator says, p. 63, "Therefore an obstructing matter *occasions the cause of inflammation only when it proves injurious by its acrimony, or acquires acrimony by continuing long*, and thus acts by stimulating." The remainder of the paragraph is not much more luminous. "The proper seat of inflammation," we are told, p. 66, "seems to be any part to which an appulse of the red blood is *not* required:" that is, we presume he means, through which the red blood does not circulate; but he immediately adds, "therefore the small red arteries," that is, the vessels through which red blood *does* circulate, "are chiefly liable to inflammation."

Having described the nature, cause, and seat of inflammation, the author proceeds to state the different modes or ways

by which it terminates, and the treatment that from experience has been found most salutary; in all which we find nothing new or exceptionable; we shall, therefore, pass to the next head, in which he treats of fevers in general.

After examining the opinions of different writers as to the nature and cause of fevers, from Hippocrates to the present time, concluding his research with giving an analysis of the theories of Boerhaave, Tode, and Cullen, he says, p. 139, "From the preceding observations, (for I do not wish to prosecute any farther the sentiments of others on the subject,) I imagine it may be sufficiently understood with how much difficulty a short, perfect, and generic description of fever, to supply the place of a definition, is attended. Since fevers, therefore, both at their commencement, and during their progress, at their declension and departure, according to the nature, causes, and symptoms of each, and the subjects they attack, assume the greatest variety of appearances, which cannot be properly comprehended in a few words, it is of great moment to give a very full and accurate description of the complaint; or, from the symptoms and peculiar affections of each, which are obvious to the senses, and can be attended to by the physician, some more certain knowledge of it may be had, that our judgment concerning the presence of fever may be the better guided.

"But, when such a judgment is to be formed, the practitioner examines the patient's pulse at the wrist, and sometimes at the temples; he tries the heat of the skin, breast, and forehead, by applying his hands to the parts; he inspects the urine; he attends to the colour and appearance of the face, eyes, and tongue; and carefully inquires into the state of the different functions; and, according as these, or several of them, deviate from the usual order of nature, he pronounces fever to be present."

Dr. George Fordyce, whose work was probably not published in time to be seen by the author, (who died, we understand,

stand, before he had completed the arrangement of the last volume of this work,) after examining the symptoms usually attendant on fever, as heat, quickness of the pulse, thirst, with a dry furred tongue, prostration of strength, headach, &c., all of which, he observes, are frequently present when there is no fever, and some or other of them absent in fever, gives the following definition: "Fever is a disease affecting the whole system, manifesting itself by a depression of the powers of sensation, irritability, and action in the body, and of the power of memory, imagination, and judgment, in the mind, with contraction of the small vessels throughout the body, an accumulation of fluids in the large vessels, and some peculiar affection of the stomach."

Our author enumerates the symptoms usually acknowledged to constitute fever, and adds, "From an accurate examination of these symptoms, the presence of fever may be easily detected. For neither an unfrequent or slow, a quick or frequent pulse, nor the heat nor natural colour of the urine, nor the absence of thirst, nor the prostration of strength, nor its remaining undiminished, will lead the physician into error, if he does not ascribe too much to each of them apart. For they must necessarily be conjoined before any certain inference can be drawn from them. There are, however, a few symptoms, which, I confess, are generally peculiar to the febrile state. At the commencement the patient, for the most part, is seized with trembling or rigor, or becomes cold; more rarely he is attacked with fainting, or has a strong propensity to sleep; shortly afterwards he is affected with great and long-continued heat, together with a certain anxiety, and, in a particular manner, with languor, thirst, dryness of the mouth, and pain of the head, or heat and other uneasy sensations. But if to these are added frequency and celerity of the pulse, I do not deny that our judgment may be formed with more certainty. Wherefore the celebrated Buchan has laid it down as the principal and most uniform symptoms of fever, 'excessive

cessive

cessive heat, quick pulse, loss of appetite, debility of the whole system, and some difficulty in performing both the vital and animal functions'." But he had before very properly observed, "excessive heat and quick pulse" are not necessary to constitute fever. The author then gives what he calls "conjectures on the nature and cause of fever;" from which we shall give a short quotation, and then pass to the next section, which treats of the division of fever.

"It has appeared," he says, p. 144, if he mistakes not, "that the proximate cause of fever is involved in great obscurity, and scarcely to be guessed at. If any place, however, may be allowed for conjecture and supposition, in a matter of such ambiguity, it is probably to be sought for partly in the solids, partly in the fluids, and in their mutual action. For it is not unlikely that the blood, and fluids secreted from it, swerve so much from their natural state, either in quantity or cohesion, or mixture, or quality, and acrimony, both spontaneous and accidental, that the motion of the heart and arteries, and, therefore, the whole economy of the circulation and other functions, are deranged in various ways. Nor does it seem less consistent with reason to suppose, that the whole set of fibres, both muscular and nervous, are affected in such a way that there arise spasmodic and inordinate contractions and unusual affections of some parts, which not only add strength to the original disorder, but derange the whole nervous system, so as to cause it alone to seem affected."

Here again we have a jumble of words and ideas, from which it is difficult to collect any precise meaning.

Fevers have been divided, the author observes, into acute or chronic, into essential or symptomatic, into epidemic, endemic, and sporadic, into malignant or benign, &c.; but such a division being applicable to other diseases, rather marks the frequency, duration, or greater or less severity of the fevers, than any specific differences in them. "For which reason," he goes on to say, "laying aside such divisions and differences

of

of fevers, and passing over a good many others, which, although they be started by very approved authors, do not seem more worthy of approbation than those already mentioned, I shall proceed to such as I consider more deserving of notice, without further delay. *But the divisions, of which I approve, are such as are taken from a close observation of nature, and are attended with certain unequivocal marks, which are observable, upon the first examination, and are obvious to the senses.* For if they should be sought from our observation of the symptoms, as some would have it, they will not appear till the disease is far advanced; because frequently those symptoms, by which our judgment would be regulated, do not shew themselves immediately at the commencement of the disease. And indeed it was among the first discoveries, that all fevers whatever either continue without intermission during their whole course, or occasionally experience a cessation of fever for some time: the former are denominated by Celsus 'assiduæ,' by the moderns 'continued;' the latter 'intermittents.' Therefore, the first and most general division of all fevers will be into 'continued' and 'intermitting'."

But true no-meaning, the poet observes, puzzles more than sense.

We shall pursue the author's division of fevers.

Continued fevers are again divided into simple continued fever, or those of one course, and into remittents, or such as consist of several distinct courses, without any intermission; or into compound fevers, which, in a following part, p. 192, the author explains to be "composed of continued fevers and intermittents, or of simple continued fevers and of remittents, variously combined." This part is not very clear; but we must wait for the developement, until the appearance of the second volume, where the consideration of this species of fever, which the author calls also "febris composita, proportionata, complexa, or complicata," is resumed.

"Thus," the author says, p. 192, "the whole class of fevers is

very conveniently divided by Nature herself into *four parts in all*. But since the *manner of the order* in which the subject is treated, is attended with very great utility, and is frequently also an assistance to learners, I shall begin first with intermittents, then proceed to continent fevers; from these I shall go on to remittents; and lastly, to complete the subject, I shall speak of the compound ones. For I think that this arrangement is better adapted to the use of beginners than any other, as it marks the gradations, and, as it were, leads them from the more simple and usual kinds of fevers, to the more complex, obscure, and such as are less perfectly understood. Doubtless, if a person attentively considers apart each accession of an intermitting fever, and the more manifest stages, namely, its commencement, progress, and remission, he would acquire a perfect view of the shortest and most simple fever. Next let him turn his attention to continent fevers, which consist of an uninterrupted paroxysm, and he will perceive between each the greatest affinity in their attack and progress, with this difference only, that in the continent fevers the periods of the accession, namely the commencement, increase, and remission, are lengthened out, not to a few hours, but to several days and weeks; nor does the fever, when it has arrived at its termination, like an intermittent, return at stated periods. After observing these things, if he form to himself the idea of the accessions of an intermittent approaching each other, becoming contiguous and united, it will most conveniently lead him to an intimate acquaintance with the nature of remittents. Nor will it require great labour for him to understand the combinations formed by these three kinds of fevers."

We shall pass over a long account of the cause, nature, and differences of intermittents, as affording little satisfaction, only laying before our readers one or two of the author's sagacious questions, as to the manner in which the causes operate in producing this kind of fever.

"Do

"Do marshes," he inquires, "and continued rains, or inundations, in the very heart of which intermitting fevers are fostered as in their natural seat, augment or vitiate the bile? Or rather, do they exhale some putrid miasma, or some kind of foul air, by which the body is soon infected? Or do they act upon it in such a manner, *that a peculiar vitiation is evolved in the fluids* calculated to excite fever?"

We shall close this section by giving a small extract from the list of remedies recommended in the cure of intermittents.

"After cleansing the primæ viæ," the author says, "advantage is usually derived from the employment of some of those remedies which are opposed to the peculiar known vitiation of the fluids or solids, and, as it were, correct the remote causes, commonly called febrifuges, because they sometimes of themselves remove the fever. Among these a *principal rank is held* by simple whey, or alternated with decoctions of bitter herbs, and to be taken for several days on an empty stomach. Next come certain plants, as succory, dandelion, fumitory, agrimony, carduus benedictus, wild germander, lesser centaury, wormwood, rue, white horehound, motherwort, cinquefoil, hatchet-vetch; likewise, flowers of camomile, tansey, bastard hemp, agrimony, mountain arnica, as also the roots of the wild prune, Persian apple-tree, Virginian snake-root, clotburr, gentian, the bark of the nut-tree, the second of the ash-tree, of the horse chesnut, willow, oranges, cascarilla, quassi-wood, or its root, cypress-berries, and all antiscorbutic plants, especially the trifolium fibrinum; from all which, decoctions, infusions, juices, extracts, tinctures, powders, electuaries, pills, and mixtures of various kinds, are prepared."

Werlhoff also recommends Dippelius's animal oil, taken to the extent of twenty-five drops, (the prescription for making the oil is not given;) and Friccius advises the use of certain poisons, especially arsenic, nux vomica, hemlock, St. Ignatius's bean, spiders, the urine of men or cattle, pulvis pyrius, pepper,

pepper, &c. "But experiments," the author observes, "instituted for the purpose, have proved them to be either noxious or nugatory, especially arsenic, from the use of which De Haën, Storck, principal physician to the Emperor, and Quarin, have observed a great many almost incurable disorders to rise."

Arsenic is, however, known to be the basis of the ague drop, which frequently succeeds in curing intermittents, after they have resisted the force of the bark, and of other the most powerful medicines.

But the bark, when genuine and unadulterated, in which state, the author says, it is rarely to be now met with, exceeds all other remedies in this complaint; and he concludes this section with describing the different modes of preparing and administering it. He then treats particularly of quotidian, tertian, and quartan intermittents, with their varieties, which must be treated, he says, according to the various symptoms with which they are complicated; that is, when hysterics, hypochondriasis, convulsions, and epileptic motions are joined, antispasmodics, stimulants, and antiepileptics, besides the general evacuations, indicated by plethora, or indigestion, must be occasionally interposed while giving the bark.

In the next and last section, or part, the author treats of continent fevers; these are divided into the ephemera, synochus simple, or synocha, which is very similar, he says, to the ephemera extensa, but somewhat more severe, and of longer duration; the putrid synochus of the ancients, differing from the simple synochus in malignity; the slow nervous fever, commonly, he says, called the malignant fever. Each of these kinds of fever, with their varieties, or different species, are described, and such methods and remedies recommended in their treatment, as are usual, we presume, in the country where the author practised. As a specimen of this part of the work, we will give the general plan of treatment of the slow nervous fever, which is summed up by the

author

author in the following words: "But the whole plan of cure," he says, p. 504, "should be directed (as we are informed by the experience of eminent physicians) to rouse the languid strength, and excite it by a gentle stimulus, to remove lentor, and to add to the blood recent and salutary fluid, to supply the place of that which is acrid and vitiated. Among the cordial and alexipharmac remedies, possessing an aromatic stimulus, (which are suited to this fever, especially the sporadic and spontaneous kind, because they are attenuating, inciding, and gently exciting,) are celebrated, contrayerva-root, scordium, rue, angelica, carduus benedictus, volatile salt of amber, hartshorn; the same with amber, tincture of saffron, castor and amber, camphor, theriac, diascordium, confectio hyacinthina, compound contrayerva-powder, and the like. Some of these likewise afford remarkable relief to the derangement of the nerves and spasmodic affections. Camphor also is supposed to have this advantage, that, when it is mixed with galbanum and silphium (bastard marigold,) it proves not only remarkably resolving, but also procures sleep, and therefore prevents or removes watching and delirium. But in the employment of all these, we must not only look to the temperament, habit, age, sex, climate, and other circumstances, but there must also be some moderation observed, that the fluids may not be too much agitated and heated, or sweat too soon called forth, especially at the beginning and during the advancement of the disease. From the former of which hot fits and flushings would become frequent, and likewise spots and miliary eruptions, with anxiety, delirium, and oppression of breast, would follow. From the latter, in consequence of the excessive loss of fluids, and resolution of the strength, tremors, subsultus tendinum, shiverings, syncope, cold sweat, and lethargy, might be apprehended."

The principal character of this extract, and indeed of the whole book, is want of clearness and precision, so necessary in all works, but especially in those destined for the instruction

of students. The author has amassed an infinite variety of matter, much of it from quarters little known in this country. But the quotations, poured out with profusion, lie without order or method, and are rather calculated to gratify curiosity, than to communicate instruction. Had the errors been confined solely to the diction or language, we would have compared the translation with the original, and corrected them; but those we have now mentioned belong exclusively to the author, are inherent in the work, and are incapable of being corrected: we therefore stand excused from taking that labour.

The last chapter treats of hectic fever, "the preceding or procatarctic causes of which," the writer tells us, "*occasion the heat,* either because they consume a great deal of the substance of the solids, or because *they excite excessive heat,* or because they may effect both, or because—" at ohe jam satis!

---

ART. XI. Dr. J. FAHNER's *Beyträge zur pratischen und geritchtlichen Heilkunde, &c. i. e. Contributions relative to practical and forensic Medicine. Vol. I.* By Dr. FAHNER, of Ilfeld. Crown 8vo. 320 pages. FRANZEN and GROSSE, Stendal. 1799.

DR. Fahner's merits as a practical physician are generally acknowledged in Germany, and the volume before us exhibits several proofs of his being deserving of the esteem in which he is held. The most remarkable cases contained in this volume are recorded under the following heads:

*Some Remarks and Observations relative to a variolous Epidemy in the Underhartz.*

This concise and instructive article is deserving of an attentive perusal. The epidemy did not admit of a cooling regimen, and in most of the patients was rendered particularly dangerous by the effects produced by ascarides. Opium, the external application of mercury, warm fomentations, and,

in

in some instances, emetics and gentle purgatives, during the fever attending the eruption, proved of signal service, when they were indicated. Out of fifty-three children, whom our author attended, one only died. Several of the convalescents were afflicted with large excrescences on the head, upon an average from two to three inches long, and in some cases amounting to ten in number. They were removed by the application of mercurial ointment, and the internal as well as external use of bark. In one of his patients the disease terminated in a caries, which destroyed the whole upper jaw and the teeth. The child, who was three years old, was, however, saved by the application of the phosphoric acid; a callus was formed, and gradually ossified.

*Some Cases of Jaundice.*

The author has recorded nine cases of the jaundice, in which bark, compounded with one third of tart. tartarisat. and administered every three hours in small doses, effected a speedy cure. The author, however, is by no means inclined to consider this medicine as a specific against the jaundice; though he is convinced that it will produce the best effects in all stages of this disease, when a remitting or intermitting fever has preceded, or where the cause of the evil originates in a debility of the lymphatic vessels or the organs of digestion.

*A Case of Retention of Urine.*

A pregnant woman was afflicted with an obstinate retention of urine, which was evacuated by means of a catheter. But the retention returned again, after a short time, when, upon examination, there was perceived in the urethra a soft and folded body, which occupied the whole vagina, and is stated to have been the internal coat of the bladder, from which it had separated itself. It was extracted without much pain; but the patient died soon after.

*A large Excrescence in the left Ovarium of an old Maid.*

The left ovarium, after some quarts of a watery fluid had run

out,

out, weighed above twenty-seven pounds. The inside of the ovarium was divided into a great number of cells of various sizes, which contained a large quantity of very heterogeneous matter of different colours, but entirely free from fetid smell.

*An intermitting Fever, attended with Fits of Delirium and other remarkable Symptoms.*

The Peruvian bark suppressed the fever in a short time; but then the patient could not keep the smallest quantity of nourishment upon her stomach, every attempt at taking the least food being succeeded by the most violent vomiting. As no gastric symptoms appeared, the author concluded there was a metastatical irritation. The patient was scrophulous, and her auricular glands were very much swelled, which led Dr. Fahner to imagine that the scrophulous acrimony had been transferred to the region of the stomach. He prescribed twenty grains of æthiops mart. with forty grains of sugar, and two grains of extr. aconit. to be taken twice a day. A drachm of mercurial ointment was, at the same time, rubbed upon the stomach. On the third day, copious discharges of urine ensued, the swelling of the glands visibly subsided, and the vomiting ceased in a short time.

*Madness occasioned by sudden Joy and violent Love.*

Sudden joy at the death of a disgusting old wife, whereby her young husband obtained possession of a considerable inheritance, rendered still more valuable by the probability of his being able to marry a beloved servant, deranged the young widower's intellects. The patient was, at the same time, seized with a most violent priapism. It is remarkable that camphor, of which, in the beginning, a dose of six grains, and afterwards of twenty grains, was administered every three hours, at first remained inefficacious, but notwithstanding at last conquered the most violent priapism and madness. The connubial connexion which he afterwards formed with the object of his love proved childless.

The author's observations relative to the *medicina forensis* are

are less interesting. The three following alone deserve being laid before our readers.

*Account of the Disease and Dissection of a Man who, after having received a Wound in the Heart, did not die before the eleventh Day.*

The wounded person was sometimes extremely ill, and at other times in a tolerable state. The wound was inflicted by means of a knife. He was copiously bled after he had received it. The point of the heart was wounded. We are sorry the author has not informed us how large the wound was, nor how deep it penetrated.

*Dissection of an Idiot who suddenly dropped down dead in the Street.*

This is a curious and interesting account. The dura mater adhered firmly to the cranium, and when both were separated from the mass of the brain, it occupied much more room than before, rising, by means of its elastic power, considerably above the cavity in which it was contained. Whilst it extended itself, the features of the deceased changed instantaneously in a most striking manner, and the silly appearance of the physiognomy vanished almost entirely. The author says, that he observed the same phenomena in a child who also was an idiot and deformed. We need not add that this observation, if true, is important both in a physiological and pathological point of view.

*An Account of the Dissection of a Person who died in consequence of his having swallowed Verdigris.*

French beans warmed up, with the addition of vinegar, in a tinned copper stew-pan, and greedily devoured by a young man, proved mortal in seventy-eight hours. When his body was dissected, the stomach appeared green, its coats were contracted, and found almost as thick as a quill. The intestines as well as the stomach contained a green fluid. The whole body was of a deep yellow colour; and all the nails of his hands and feet were of a livid appearance.

ART. XII. *Memorial to the Managers of the Royal Infirmary.* By JAMES GREGORY, M. D. President of the Royal College of Physicians, Professor of the Practice of Physic in the University of Edinburgh, and First Physician to his Majesty in Scotland. Quarto, 260 pages. Printed by MURRAY and COCHRANE, Edinburgh. 1800.

AS the author did not intend to put the public in possession of his work, its design being entirely of a local nature, we shall content ourselves with only giving a general sketch of the subjects here discussed.

In the First Section is stated the leading object of this Memorial. To call the attention of the Managers to the mode of attendance of the Surgeons in the Hospital promiscuously by rotation. This is an infringement of the Charter of the Royal Infirmary, and a violation of the promise of the original Managers, on the faith of which the Charter was granted. Very bad for the patients. The result of a bargain with the Surgeons for money. Such a bargain inconsistent with the purpose of the Infirmary, and beyond the power of the Managers. It ought to be set aside, as bad for the patients, illegal, unjust, and inconsistent with the duty of the Managers, as expressed in the Charter of the Infirmary.

*Sect.* 2.—Present state of the attendance of the Surgeons in the Infirmary. Four fifths of the senior Surgeons have withdrawn from it. All the junior Surgeons, to the number of twenty or more, who reside in Edinburgh, attend and operate in the Hospital in rotation, each for two months at a time. General view of the nature and greatness of the evils necessarily resulting from this system, which have been long and severely felt, and often complained of. These evils so great and notorious as to supersede all particular inquiries, and all discussions which might be deemed unfavourable to any individuals. Extracts from the printed Memorial of the Surgeons who brought about that bargain with the Managers. Remarks

on

on that Memorial, and on the unworthy principles on which that bargain was made.

*Sect.* 3.—Additional remarks on the evils of the system of rotation, and on the necessity of selection and permanent appointment of a few attending Surgeons for the good of the patients. Reasons for expecting that the Surgeons will soon be convinced of this, if they will fairly attend to it; and that they will act as wisely, liberally, and honourably, at present, as the Physicians did on a similar occasion fifty years ago. Supposition stated and considered that they may not do so. Then they must either assert that their promiscuous attendance by rotation is not bad for the patients, or else, that, though bad for the patients, it is the right of the Surgeons by their bargain with the Managers, which right they will maintain. Importance of keeping these two propositions or pleas quite distinct.

*Sect.* 4.—Argument or plea of the Managers stated logically. General view and offer of the most ample and unexceptionable evidence, to prove that the attendance of the Surgeons in rotation is very bad for the patients.

*Sect.* 5.—Argument to prove that every bargain or contract between the Managers of the Infirmary and the Physicians and Surgeons, with respect to their mode of attendance in it, which is bad for the patients, must be null and void. Illustrations of this argument. Analogy between the duty of the Managers and that of the Physicians and Surgeons of an hospital. The former, in law and equity, bound to procure, the latter to do, whatever is best for the patients. This moral duty supreme and indefeasible. Every contract, either directly and avowedly inconsistent with it, or indirectly, by its necessary consequences, implying the neglect or violation of such a moral duty, is a pactum illicitum, which never can be enforced, and must be set aside, or in some cases might be punished by law.

*Sect.* 6.—The same subject continued, with further illus-

trations. Additional remarks on the bargain of the Managers with the Surgeons. Some mala fides in that transaction. The money given by the Surgeons on condition that they should be allowed to attend promiscuously by rotation in the Infirmary, was a bribe to the Managers, not as individuals, but in their corporate capacity. Both parties knew that they were doing wrong to a third party,—the patients. Excuse for the Managers. Their motive was pure and honourable. They knew not the greatness of the wrong which they were doing. No excuse for us, if we retain the bribe, and persist in that wrong.

*Sect.* 7.—Strict logical proof of the general principle, that every bargain between the Managers of the Infirmary and the Surgeons with respect to their mode of attendance, which is bad for the patients, must be null and void in law. The contradictory principle assumed, that such a bargain is valid and indefeasible. Cases stated with a view to shew the absurd inferences implied in it. Such a bargain supposed giving the right of attendance in the Hospital only to the oldest, or only to the youngest, or only to the worst of the Surgeons. The present system of rotation actually implies, and ensures, and makes worse, what is worst in all those three supposed cases. Remarks on the absurd attempt made many years ago to remedy the evils of the system of rotation, by lengthening the time of each Surgeon's attendance from one month to two months. Curious oversight in point of arithmetic in those who made that change.

*Sect.* 8.—Illustration of the preceding argument by the stating of a case, a contract between two Corporations, similar to that between the Managers and the Surgeons in every respect, except that there is no third party, like the patients in the Infirmary, whose interests or rights can be injured by it. Such a contract, whether advantageous or the contrary to one or other of the contracting parties, would be valid in law and equity. Absurdity and atrocity of applying the same principles

ciples to the contract between the Managers and the Surgeons. Brief summary of the argument for the Managers in law and equity.

*Sect.* 9.—Proposal for a more rational system of the attendance of the Surgeons in the Royal Infirmary, on the pure principle of what would be best for the patients. Two or three ordinary attending Surgeons, the best qualified that can be got, permanently appointed. An assistant from among the junior Surgeons, to each of them, either from the first, or as soon as wanted. Consulting Surgeons, more or fewer, men of eminence in their profession and long experience, to be called in only in extraordinary cases. Even in such cases, only one, or two, or three of them to be called in, and to be deemed a proper and sufficient consultation. The choice of these, from among the consulting Surgeons appointed by the Managers, to be left, in every particular case, to the ordinary attending and operating Surgeons. Nuisance of promiscuous and very numerous consultations. Remarks on the uses and abuses of consultations. Of medical education, societies, eloquence, orators, harangues, debates, controversies, quarrels, inveterate rancour, and everlasting warfare. Illustrations and examples of this from distant ages and countries, and from different branches of Physic and Surgery. Reference for information concerning the most recent controversies among the Surgeons of Edinburgh to the writings of Jonathan Dawplucker, Esq. Some account of him and his newly invented Janus-like mask, his great talents, peculiar wit and acrimony, rigid impartiality, and unquestionable authority. Jonathan Dawplucker, Esq. the best of all possible witnesses on both sides. Apology for certain omissions in this Memorial. Offer to supply in an additional Memorial, on receiving authentic information of the facts, any omissions with respect to matters of fact, which involve the interest either of the College of Surgeons in general, or the personal interest of any individual members of it.

ART. XIII. *Traité complet d'Anatomie; ou Description de toutes les Parties du Corps humain.* Par le Cit. SABATIER, Chirurgien en chef à la Maison national des Invalides, Professeur à l'Ecole de Santé, et Membre de l'Institut National. Nouvelle Edition, corrigée et enrichée de Planches, avec l'Explication qu'en données les célèbres Albinus et Lancisius. Tom. III. Duodecimo. Paris. 1798. Imported by DE BOFFE. Price 14*s*.

THE first edition of this work appeared in 1774, and the second in 1781. The latter differed but little from the former, except in typographical correctness. This third edition will be found in some respects superior to those: it is divided, as before, into seven parts; namely, Osteology, Myology, Splanchnology, Angeology, Neurology, Adenology, and the Integuments. The author has distinguished himself by the exactness of his descriptions, the precision of his style, the clearness of his arrangement, the profundity of his knowledge, and the occasional remarks he has interspersed, which give spirit and interest to the whole.

---

ART. XIV. *A Series of Engravings, accompanied with Explanations, which are intended to illustrate the morbid Anatomy of some of the most important Parts of the human Body. Fasciculus IV. comprehending the chief morbid Appearances of the small and great Intestines.* By MATTHEW BAILLIE, M.D. F.R.S. L. and E. and Fellow of the Royal College of Physicians. Large 4to. with nine Plates. JOHNSON, London. 1800. Price 1*l*. 1*s*.

WE have already given an account of the former parts of this valuable work in our preceding numbers *. The first plate of the present fasciculus illustrates the various effects of inflammation upon the outer surface of the intestines; and likewise

wise exhibits some scrophulous masses which constitute unusual appearances of disease.

The second plate presents to our view five different appearances of ulcers on the inner surface of the intestines.

The third plate shews the morbid effects of that species of dysentery which often arises in camps; and also an uncommon change in the great intestines, whereby their inner membrane is formed into numerous thick folds.

The fourth plate illustrates the morbid alteration of structure belonging to scirrhus and cancer of the rectum.

The fifth plate exhibits some morbid changes affecting the lower part of the rectum; such as fistula in ano, piles, and that state of imperforation which ends in a cul-de-sac.

The sixth plate represents an intus-susceptio in the jejunum or upper part of the ilium; also a polypus in the sigmoid flexure of the colon; and a preternatural membranous process, resembling a ring, attached to the cavity of the jejunum.

The seventh and eighth plates exhibit the appearances observable in five different herniæ, two of which are of an extraordinary nature.

The ninth, and last, plate represents the various species of worms which are generated in the human intestines: these are, the lumbricus teres, ascaris, trichuris, tænia solium, and the tænia lata.

As the present fasciculus contains a greater number of engravings than any of the preceding*, the author assigns this difference as the cause of an advance being made in the price; and he suggests that the future expense will always be in proportion to the number of plates in each fasciculus.

* See Lond. Med. Rev. and Mag. vol. i. p. 52, vol. ii. p. 64, and vol. iii. p. 165.

ART.

ART. XV. *Medicinische National Zeitung für Deutschland, und die mit demselben verbundenen Länder: i. e. Medical National Gazette, for Germany and the Countries connected with it.* 4to. Altenburg. 1798, 1799. Imported by GEISWEILER.

THIS Gazette, which was begun in 1798, being little known in England, we flatter ourselves that a short account of the plan upon which it is conducted, as well as of its peculiar merits, will not prove unacceptable to our readers *.

One number, containing from four to five sheets, in quarto, is published every month; but those who desire it may have it every week, in single sheets. It is printed in Roman characters, with a beautiful type, and upon paper much superior to what the other German gazettes are commonly printed upon. This periodical work is not intended to be a critical publication, like the Medical and critical Gazette of Salzburg, but to give a faithful and early account of every remarkable occurrence in the medical and surgical department, by which the present state of medicine and surgery is distinguished from that of former times.

Arduous as the task is which the editors have undertaken to perform, they have acquitted themselves hitherto in a manner with which the public has reason to be perfectly satisfied. The correctness and impartiality with which the most prominent features of all other periodical medical publications that appear on the Continent, are pointed out—the early accounts which in this paper are given of all new discoveries in our art—the facility with which it enables practitioners in the greatest business to keep pace with the spirit of the times—and the

* For the information of professional men in Great Britain, it is our design to give a concise account of the plan and leading features of all the respectable Journals and Reviews of medicine or surgery which are published upon the Continent; such, for example, as those in Germany, of Arnemann, Hufeland, Loder, Reil, Tromsdorff, Richter, Pierer, Baldinger, Pfaff, Hartenkeil, &c. &c.

great

great variety of interesting articles recorded in it, render it highly deserving of the careful perusal of every medical man. It contains, besides a number of short original contributions, communicated by the most eminent practitioners in Germany, concise extracts of all works which at present excite the greatest attention—ample information respecting the progress of domestic as well as of foreign literature—interesting accounts of the merits of the most eminent physicians of the age —and of medical institutions and societies, as well as their transactions—and comparisons between the criticisms on new works, published in different reviews. But what renders this Gazette most eminently useful, is the early information which it gives of all new discoveries relative to the practice of medicine and surgery. We shall slightly notice a few of the numerous practical observations with which the work abounds.

Dr. KAUSCH observes, that in a colic arising from an obstruction in the bowels, and attended with violent vomiting, he experienced the most salutary effects from rubbing laudanum upon the part where the pain was felt, as well as upon the pit of the stomach, and that the subsequent application of gentle purgatives and glysters effected a complete cure.

Dr. RAVE informs us that he experienced the happiest effects in several cases of ascarides from the application of sulphur.

Dr. CONRADI cured an obstinate iliac passion by means of tobacco glysters.

Dr. NEUMANN recommends ferrum muriatum as a powerful remedy against rachitis and atrophy, adducing numerous cases in which he administered it with great success. He commenced the cure with a purgative of rhubarb and calomel, in order to clear the bowels, and then prescribed a drachm of ferrum muriatum, dissolved in an ounce of water, of which twenty drops were taken twice a-day.

Dr. KOHLHAAS, of Ratisbon, recommends merc. dulc. with magnesia and opium, in the cure of the scrophula, cuprum ammoniacale in epilepsy, and decoct. digital. purp. in dropsy.

Dr.

Dr. KNEBEL relates two cases in which shaving the head proved mortal, and one in which the patient was saved with great difficulty.

Dr. WALLICH gives a most interesting account of an epidemical blindness which prevailed in the fortress of Ehrenbreitstein, whilst it was besieged by the French.

*(To be continued.)*

---

## MEDICAL CORRESPONDENCE.

Art. 1. *Remarks on the Means of bringing on premature Labour, and the Circumstances under which this Practice may be recommended.* By Mr. MERRIMAN, of London.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

IT is always an unpleasant office to criticise, or call in question, the statements of any writer, more particularly of a gentleman of respectability; but it sometimes becomes necessary in order to prevent the dissemination of ill-founded opinions. This consideration induces me to offer a few observations on a paper in your last Number, p. 100, by Mr. Leighton, containing Remarks on Mr. Barlow's Mode of exciting premature labour.

Mr. Leighton states, "that being engaged to attend a woman in her labour, who had had five children, each of which had been taken away *by bits*, and finding the pelvis distorted, he determined to adopt the method of bringing on premature labour at seven months. At the end of this time he introduced a catheter, and ruptured the membranes *with great ease*. The waters immediately followed in large quantity, and she was seized with pains which lasted two or three hours; notwithstanding which, her labour did not come on till the full period of gestation, and the child's head was then obliged to be artificially lessened."

It

It is to be wished, that Mr. L. had been rather more particular in describing this operation: his statement is so loosely worded, and the result of the operation is so different from what has usually been produced, that one cannot help suspecting, that he has unintentionally been led into some mistake.

One would have expected, that some difficulty would be met with in rupturing the membranes in such a situation, where there is no tension, and where so blunt an instrument as the catheter is employed; yet Mr. L. informs us, that he ruptured them with great ease. It is likewise a very extraordinary circumstance, that, after the waters were evacuated, and pains had come on for two or three hours, as if labour was advancing, they should suddenly cease, and should not return till the full time of gestation was expired, viz. after an interval of eight weeks.

This is certainly a very unusual length of time for the uterus to remain contracted upon the fœtus, without being irritated to expel its contents; and more particularly so, as it had been in action for two or three hours after the evacuation of the waters.

Mr. Leighton indeed remarks, that cases frequently occur where the waters break by involuntary exertions, but without producing labour, or preventing the patients from going their full time. The frequency of these cases, at any period of pregnancy exceeding a month from the full period, I very much doubt; it is indeed scarcely possible to conceive, that a child could continue to exist in such a state so long as a month; and if it were dead, the action of the uterus would, in a very short time, be exerted to expel so putrid a mass. It may likewise be remarked, that labour is more likely to come on speedily after an artificial evacuation of the waters, than where this is occasioned by an involuntary cause.

I have consulted several authors of credit, in order to ascertain the utmost length of time which may elapse after the evacuation of the waters before labour-pains come on. I

find nothing to countenance the opinion of a greater length of time than eighteen or twenty days, and these are rare occurrences. Mauriceau mentions one case of three weeks, and several of a much greater length of time; but on these he expresses an opinion, that the efflux of the waters was occasioned from a dropsy of the womb, or some other cause, and denies that the waters of the amnios were really evacuated. Speaking of one of these cases, where the mother had been voiding a large quantity of waters for nearly two months, he says, (sur la Grossesse, Obs. 688,) "Si elles eussent été des véritables eaux de l'enfant, il semble que cette femme en ayant vuidé tout d'un coup plus d'une pinte la premiere fois, deux mois devant que d'accoucher, son travail se seroit declaré dès lors; parceque son enfant n'auroit pas pû demeurer dans la matrice, apres un si grand écoulement de ses propres eaux." Women, it is true, often assert that they have continued to increase in size, and have gone their full time, though the waters had broke some months before; but such relations meet with no credit, because the probability of a woman's being deceived in such a particular is very generally known.

It has happened to me to be acquainted with no less than ten cases, in which the operation for bringing on premature labour has been performed.

In most of these considerable difficulty was experienced in rupturing the membranes. If a catheter was made use of, it was generally found too blunt to penetrate them; if a more pointed instrument was used, it required some address to prevent the child from being injured, as its head was often felt in contact with the membranes. In all the cases, however, the operation was performed without injuring either the mother or the child.

In not one of these instances did the pains come on in less than twelve hours, nor did the time between the operation and the access of labour ever extend to a week.

The

The benefit to the mothers was uniformly great, inasmuch as they passed through their labours much more safely and easily than they had before undergone, and recovered expeditiously and completely. It likewise deserves to be remarked, that they were all so sensible of the advantages which this method of practice procured them, that they were very desirous of its being repeated in their subsequent pregnancies.

In these ten cases four children were born alive, and one perished in the birth, owing to its being a breech presentation. The other five were dead before the labour-pains came on, and the deaths of these seemed to be occasioned by a smart fever attacking the mothers after a severe shivering fit on the approach of the labour-pains, which fever generally lasted eight or ten hours, and even sometimes till after delivery.

If Mr. Leighton's case be looked upon as one in point against this method of assisting women with distorted pelves, which I am very far from allowing, I think the method preferred by him, namely, that of dilating the os uteri, introducing the hand, turning the child, and bringing it down by the feet, is liable to greater objection. The pain which a woman, without a single symptom of labour upon her, must undergo in the attempt to dilate the os and cervix uteri at seven months, so as to introduce the hand; the danger likely to ensue from the irritation and inflammation produced by the operator's efforts; and the probability of the child's losing its life, by pressure on the navel-string during the extraction, render this mode of practice so hazardous, that it seems little likely to meet with supporters, when the much easier and safer practice of puncturing the membranes is already in use.

This operation, indeed, has not till lately been much the subject of public discussion, though it has occasionally been had recourse to for a great number of years; the reason of its not being made more public, has probably been a well-

grounded fear on the part of the older practitioners, that the operation might be sometimes unnecessarily performed by rash or incompetent persons.

Of late, however, it has been more frequently spoken of, and recommended as worthy of being resorted to in some cases of distorted pelvis; it is, therefore, become necessary to have the subject fully discussed and understood.

This operation, I believe, was first proposed in peculiar cases of distorted pelvis only, viz. to give a chance of saving the life of the child where the pelvis of the mother was spacious enough to allow a child of seven or eight months to be born alive; but too much deformed, or too narrow, to permit a common-sized child of nine months to pass entire. In this view the practice is subject to considerable limitations; for, if the possibility of preserving the child's life be the sole inducement to performing the operation, (and there are probably many practitioners and parents who would think the practice entirely unjustifiable, unless this possibility exist,) it should never be undertaken, where the pelvis is so small as to prevent a child of seven months from being born alive: nor should it ever be performed till seven complete months of gestation are elapsed; as the nearer the time approaches to the natural period of delivery, the greater is the probability of the child's surviving; before seven months there is no chance: nor when any other part than the head of the child presents *; because, under these circumstances, the probability of preserving the child's life is much diminished.

But there are some cases of extremely distorted pelvis, in which this practice, if had recourse to at a still earlier period, might prove very beneficial to the mother, though necessarily

* In one of the above-mentioned cases the operation of puncturing the membranes was suspended for some days, on account of the presentation of the hand, which was plainly distinguishable through them. In three or four days the hand was found to be retracted, and the operation was successfully performed.

fatal

fatal to the child: I mean, in those deplorable cases which sometimes occur, in which the crotchet must be used with the certain loss of the child, and great hazard to the mother, or the woman must submit to the Cæsarean section, with scarcely a possibility of surviving. It is highly deserving of consideration, whether in such cases this method ought not to be recommended; but in determining the propriety of this, questions are involved which I do not feel inclined at present to discuss; I shall merely remark, that the less confined the limits are, within which this operation is permitted, the more scope is given to the evil practices of the unprincipled and the dangerous ones of the ignorant.

How various soever opinions may be upon this head, all must agree that in any of the following cases the operation is altogether unjustifiable:

1st. Where the woman has once been delivered of a full-grown live child, however severe and difficult her labour may have been.

2dly. Where (though the woman has before been delivered of a dead child after a very severe labour) the difficulty has not been occasioned by a deformity or narrowness of the pelvis.

3dly. Where (though the pelvis be distorted) the deformity is not so great as to render the passage of an entire child at the full time impossible.

Under such restrictions and limitations, if every other circumstance be favourable, the woman's health and spirits entire, and the practitioner a man of experience and reputation, I cannot but consider the operation as advisable, perfectly safe to the mother, and often preservative of the child.

*Queen Street, May Fair,*
*August 6, 1800.*

SAMUEL MERRIMAN, jun.

Art.

Art. 2. *Case of dislocated Thumb, and of Ranula; with Observations on the Cow-pox.* By Mr. ROWLANDS, Member of the Royal College of Surgeons in London, and Surgeon to the Infirmary and the Lying-in Charity at Chester.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

IF the following cases merit a place in your Review, they are much at your service.

I am, Gentlemen, your most obedient servant,

*Chester, August* 15, 1800. G. ROWLANDS.

1. *A Dislocation of the Thumb, attended with particular Difficulty in the Reduction.*

In the summer 1790, John Davies, a flax-dresser, being much intoxicated, fell down several steps, and dislocated his thumb, in its articulation with the metacarpal bone. In the following morning he went to the Infirmary, and several attempts were made by the house apothecary and my apprentices to reduce it. I was desired, being the surgeon of the week, to attend him; and, after various unsuccessful efforts to replace the bone, I was obliged to leave the unhappy patient in the same state of distress and pain. He was admitted an inpatient; the part was well fomented, and the stale beer poultice was applied around it. The next day some farther trials were made to reduce the bone, but all to no purpose. I then proposed to make an opening to examine the state of the joint, and the man gladly offered to submit to any thing that might be suggested, which was likely to restore to him the use of his thumb, and to free him from pain. An incision was made longitudinally, an inch and a half in length, on the side of the thumb, down to the bone; and a second incision, at right angles from the middle of the first, through part of the opponens pollicis, so as to give a fair view of the joint: after wiping

wiping the blood away, I discovered, by moving the thumb, that the end of the bone had slipped under the tendon of the flexor longus pollicis manus, and was so strictly bound by it, that I had much difficulty in disentangling the bone, which I at last effected, by drawing the tendon through the joint with a small blunt dissecting-hook. The difficulty attending this case, even after the nature of the accident was exposed to view, is not to be described; and it appears to me certain, that without the opening which was made, the man must inevitably have lost the action of the thumb. The wound healed in a short time, and he has since then enlisted into a regiment of cavalry.

### 2. *A Case of Ranula.*

A clergyman, 25 years of age, of most respectable character, who resides at some distance from this place, strained his jaw with yawning, about the 13th of January 1799, and the next day caught cold in his face, which swelled very much with a good deal of pain, and occasioned what was supposed to be the mumps: in about a fortnight it subsided nearly, but not quite. In the latter end of March he caught a fresh cold, when he observed a swelling under his tongue, which gradually increased till June the 4th; when getting very wet in a shower of rain, his throat began to swell rapidly with a great deal of pain. He now applied to a physician of eminence in this city, who directed such remedies as were best suited to his case, but without effect; for the swelling continued to increase, with such an unalterable stony hardness as made his situation truly alarming. On the 19th I was desired to visit him, at a friend's house, about ten miles from hence. He had not swallowed any thing, or slept, for two nights, and respiration was with difficulty performed. His teeth were so close, that I could not pass a finger to examine under his tongue; neither could I discover a fluctuation any where externally. There was no time to be lost, as he was in danger of being suffocated; I therefore proposed to make

an

an opening under the chin, of sufficient depth, if matter had formed, to penetrate the cyst, or, at all events, to discharge blood, which might produce some abatement of the swelling. I made a puncture an inch deep, and no pus followed, and scarcely any blood. I now despaired of relieving him; but passing a probe to discover the depth of the incision, I felt an elasticity, as if it pressed against a distended bladder, by which I was encouraged to push a lancet deeper, and a plentiful discharge immediately followed. Immense quantities of pus continued to flow into the poultices for two or three days. There was a second suppuration, which required another opening; but all healed in due time, though there remained some induration for many weeks, for which he used camphorated oil, a mercurial liniment, and some time afterwards, sea bathing.

The whole of the cyst sloughed away.

It is scarcely necessary to observe, that he took bark, opium, and other medicines that the symptoms indicated.

3. *On the Cow-pox.*

It is almost needless to say any thing on the great advantage of vaccine inoculation; however, I will not omit this opportunity of adding my testimony in its favour, having inoculated my own child, and some others, with matter received from Dr. Woodville; all of whom went through the disorder without any pustules, excepting on the arm.

---

Art. 3. *Observations on the anodyne Effects of Camphor, illustrated by Cases: with a Postscript on the Use of Calomel in Jaundice.* By Mr. Harrup.

*To the Editors of the London Medical Review and Magazine.*

Gentlemen,

If you think the following instances of the anodyne powers of camphor will induce any of your numerous readers to prescribe

scribe it with the like intention, you will do me a favour by inserting them in your Magazine. From having used this remedy in a vast number of cases for these seven years past, I am convinced that, as an anodyne, it is superior to most, and inferior to none. In not a single case have I observed any pernicious consequences from the use of it; but, on the contrary, its exhibition has always been attended with the happiest effects. The following cases are not selected as the most striking proofs of its efficacy, but only taken in the order of time in which they occurred, from minutes which I made when I first began to prescribe it.

L. H. a young unmarried woman, was seized with a violent pain of the uterine region at the time of menstruation, which continued during that period in defiance of every remedy which was used. At the next return, which was very regular, the pain attacked her with more violence than before, the moment the discharge appeared. Opiates, although taken in large doses, gave not the smallest relief; æther and the volatile alkali were attended with no better success, and glysters and fomentations afforded but momentary ease. So excruciating had the pain at last become, that it appeared to me doubtful, whether the patient would not expire merely from the agony. I proposed making trial of camphor, though it must be confessed, with no sanguine expectations of benefit after the other powerful remedies had failed.

Accordingly, twenty grains of camphor were formed into twelve pills, with a little conserve, of which she took one every hour. After taking three, the pain was considerably abated, and before she had taken three more it ceased entirely. She had now about two hours calm sleep, and was then awaked with the pain, which went off after taking two of the pills at once, and did not then return, although the menses continued to flow for two days afterwards. Upon the return of the menses at the usual time, the pain also returned with the same degree of violence, but was entirely removed by

taking six grains of camphor in the form of a bolus. For upwards of two years the pain returned at every menstruation, and was each time removed by the use of camphor, which was exhibited in doses from six to fifteen grains, according to the urgency of the pain. It was often much mitigated, but never entirely prevented, by taking two grains of camphor twice a day for about a week before the expected time.

The next case that occurred was that of the gout in the stomach. An elderly gentleman, who had for many years suffered with the gout in the extremities, was some time in the latter end of November 1793 attacked with it one morning in his stomach. I did not see him till the evening, when the pain had arisen to a very alarming degree; his pulse quick and feeble; the extremities cold; and whatever he took was rejected by vomiting; twenty drops of Tinct. opii kept on the stomach, but had no effect on the pain. Some time after he took a bolus, containing ten grains of camphor, and even this afforded very little relief. About three hours after, on the repetitions of the bolus, the pain began to abate considerably; but as it was not quite gone at the end of four hours more, the bolus was repeated, which carried it off entirely. He had now several hours quiet sleep, and his only complaints were, when he awoke, some slight febrile symptoms, and a soreness at the pit of the stomach. After taking the second bolus, when the pains began to abate, he was seized with a kind of spasmodic affection of the lungs, which disappeared in a few minutes, and did not return.

Some months after, when he was again attacked with the gout in the stomach, he refused taking any thing which contained camphor, in consequence of what a physician had told him of the danger arising from it when taken in large doses.

Various remedies were prescribed with a view to remove the pain; but none of them proving effectual, he was at last

obliged

obliged to have recourse to the camphor boluses, which, in a short time, produced the desired effect.

He has since had several attacks in the stomach, all of which uniformly yielded to camphor, taken in larger or smaller doses, according to the urgency of the symptoms.

The following case shews the inoffensiveness of this drug, even when taken for a considerable length of time, by those who, we have every reason to suppose, would be the most susceptible of the pernicious effects of powerful medicines.

Mrs. N. a middle-aged woman, giving suck, was attacked with violent pain of the stomach after eating raw oysters, which was removed by the use of stimulating medicines. Some time after the pain returned without any evident cause, and was removed by the same method of cure, but with more difficulty. The pains frequently recurred, and every time with increased severity. She at last began to take three pills a-day, each composed of camphor three grains and rhubarb two grains. She continued free from pain while she took the pills regularly, which was about two months. Soon after she had a severe attack of the pain, which she attributed to taking a draught of cold water when warm. As I happened not to be in the way at the time, and she having some of the pills by her, she swallowed four at a dose, by which she was very soon relieved.

This patient continued the use of the pills upwards of twenty months, seldom taking fewer than three a day, and never under two. If at any time she happened to neglect taking one at the usual time, she felt much uneasiness at her stomach, and sometimes pain. While she continued this course of medicine she became pregnant, and was at the natural time delivered of a healthy boy.

To these cases many more, which are now before me, might be added; but, it is presumed, the above are sufficient for the purpose intended. I shall only take the liberty to add, that in all cases, even when an inflammatory diathesis pre-

vailed, where anodynes were required, I have prescribed camphor with the best success. In chronic rheumatism it seems to me superior to every other remedy. Respecting the dose, it is impossible to speak with any certainty; I have more than once prescribed it to females of a delicate constitution in the quantity of fifty grains, and repeated the dose ten hours after with great advantage.

I am, Gentlemen, your obedient humble servant,

*August* 14, 1800. ROBERT HARRUP.

*P. S.* From Dr. Gibbons's publication, which was reviewed in your Magazine for December, and from Mr. Kerrison's communication in your last Number, it appears that mercurial preparations are not in general use in icteric cases.

As an additional testimony, I take the liberty to inform you, that for several years past I have been in the habit of prescribing calomel in small doses, conjoined with rhubarb, in cases of jaundice. And so efficacious have I ever found this mode of treatment, that I have seldom occasion to use any other remedy, excepting sometimes an emetic. I have never found it necessary, even in the worst cases which have come under my care, to push the use of the calomel farther than to produce a slight soreness of the mouth. R. H.

---

Art. 4. *On the Introduction of the Vaccine Inoculation at Paris.*

" *A Monsieur* PEARSON, *Médecin de l'Hôpital de l'Inoculation Vaccine à Londres.*

" LES journaux nous ont fait connâitre, Monsieur, les essais faites en Angleterre, relativement à l'inoculation de la vaccine, et dont le succés sont dûs, en grand partie, à votre zèle éclairé. Quelques amis de l'humanité et de la science, que vous cultivez avec tant de distinction, ont formé le projet d'introduire en France, une pratique que paroit promettre de si grands avantages. Ils ont proposé, à cet effet, une souscription

tion qui est sur le point d'être remplie. Vous en trouverez ci joint le prospectus. Mais pour mettre à éxécution les vuës qui y sont exposées, nous avons besoin de votre intervention, et c'est avec confiance que nous la sollicitons.

"Quoique l'on ayt commencé ici quelques essais sur la vaccine, dont l'Ecole de Médecine plus particulièrement s'est occupée, on n'a pû cependant parvenir encore à aucun résultat positif. La difficulté de se procurer de la matière assez récente, en a sans doute été la principale cause. Nos artistes vétérinaires semblent ne point connâitre cette affection sur les vaches. Dans une seule circonstance, on a cru reconnâitre la maladie sur des animaux de cette espéce, et on a saisi cette occasion de recueillir du virus, qui a été employé concurremment avec de la matière reçue de Geneve et d'Angleterre, mais sans aucun succès encore bien reconnu. Nous nous trouvons donc privés du premier moyen nécessaire pour commencer nos essais, et c'est à vous que nous nous addressons pour nous le procurer.

" Nous desirons, si toutes fois vous jugez ces précautions utiles, recevoir des croutes ou pustules recueillies sur les vaches et sur les sujets inoculés, et des fils ou de petites eponges impregnées de la matière prise sur les uns et les autres, de ces mêmes croutes ou pustules fraiches et de l'écoulement qui s'etablit à la plaie formée par l'affection locale de la partie inoculée; les différentes espéces de matières ou substances devoient être distinguées par une indication particulière. Si votre méthode de conserver les fils dans le gaz azotté ou le gaz hydrogène, vous paroit de quelqu'avantage, nous attendons de vôtre zèle, que vous voudrez bien l'employer. Nous prenons, avec notre Ministre des Relations extériéures, les mesures convenables, pour que les moyens d'envoi les plus surs, et sur tout les plus prompts, soient à votre disposition. La société ne mettra pas moins d'empressement, Monsieur, à faire connâitre les services que aurez bien voulu lui rendre, et à vous informer du résultat de ses recherches, dont le mérite vous

sera dû en grande partie, si a l'envoi de la matière que nous vous demandons, vous avez la bonté d'ajouter quelques instructions particulières, dont nous nous feliciterons de pouvoir profiter.

" Salut, estime, et devouement.

" Les Membres composant le Comité médical de la Société formée à Paris pour l'Inoculation de la Vaccine.

" Pinel, Prof. de l'Ecole de Médecine.

" Thouret, Directeur de l'Ecole de Médecine.

" Parfait, Chirurg. Inocul.

" De la Porte, Méd. des Hôpit. Milit.

" Rouselle Chamseru, Méd. d'Armée.

" Huzard, de l'Institut.

" Tessier, de l'Institut.

" Cabannez, de l'Institut, Prof. de l'Ecole de Méd."

The above letter, as appears, was addressed to Dr. Pearson, who, however, instead of returning an answer in his own name, only presented it to the Vaccine Institution; where it was determined, that the commission should be executed by the medical establishment. Accordingly a packet, containing vaccine matter on glass, on lancets, and on thread enclosed in a bottle filled with hydrogen gas, and a letter of instructions, signed by all the members of the medical establishment, were sent to Paris on the 12th of May last, with the permission of Lord Grenville, through the hands of the French commissioner Mr. Otto. How well the vaccine matter thus forwarded answered the sanguine expectations of the Parisian physicians, notwithstanding the journey and the delay, is sufficiently proved by the following extract from the Gazette Nationale; and other French papers furnish similar reports.

*Gazette Nationale, Tridi, 23 Prairial, An 8 de la Republique Françoise une et indivisible.*

" Le 13 Prairial, l'inoculation de la vaccine a eu lieu sur trente

trente enfans, avec la matière envoyée d'Angleterre et d'apres les procédes recommandés. Des signes d'infection se sont manifestés sur neuf d'entre eux, aux époques et avec les caracteres annoncés par le Docteur Pearson et d'autres membres du comité institué à Londres pour l'inoculation de la vaccine. Il est à remarquer que les médecins Anglois avoient exprimé, dans leur lettre, ' que l'on devoit se croire heureux, va le ' laps de tems entre la collection de la matière et de son appli- ' cation, si sur vingt individus inoculés, un seul prenoit la ' maladie.' Le 19, le 20, et le 21—dix-huit enfans sur lesquels la premiere inoculation n'avoit point eu d'effet, ont été inoculés de nouveau avec la matière recueillie sur eux chez qui la premiere inoculation avoit pris. Le comité continue ses essais et instruira le public des resultats ultérieurs.

" THOURET, pour le Comité Médicale."

The Vaccine Institution, which has been already so useful in England, and communicated with various parts of Europe, to introduce the cow-pock inoculation, has issued the following notice:

" *Vaccine Inoculation Institution,*
*Warwick Street, Golden Square, July* 28, 1800.

" From the increase of patients, and the numerous applications for cow-pock matter, the subscribers are hereby informed, that it has been resolved to inoculate every Friday, as well as Tuesday, under the direction of the Medical Establishment, which at present is as follows:

" G. PEARSON, M. D. F.R.S. L. NIHELL, M. D. and T. NELSON, M. D. Physicians; TH. KEATE, Esq. F.R.S. and JOHN RUSH, Esq. Consulting Surgeons; R. KEATE, Esq. JOHN GUNNING, Esq. and J. C. CARPUE, Esq. Surgeons; A. BRANDE, Esq. F. RIVERS, Esq. and Mr. E. BRANDE, Visiting Apothecaries; and Mr. J. LEWIS, Resident Apothecary, to whom letters (post paid) may be addressed.

" The public are desired to notice, that the Medical Establishment

blishment do not authenticate vaccine matter, unless it be delivered under the appropriate seal of the Institution.

"By order,

"WM. SANCHO, *Secretary.*"

---

Art. 5. *Further Information respecting the Case of Cow-pox which was lately communicated by* Mr. MALIM. *With Observations by the* EDITORS.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

HAVING been informed that there are still some gentlemen who entertain doubts as to the case of Caroline Woodford (which appeared in your Magazine of the last month) being one of genuine small-pox, notwithstanding the very respectable authority upon which it was mentioned; I must beg, for their information, to observe, that there can no longer remain a doubt upon that subject: for I have inoculated with the matter and produced small-pox in the most satisfactory way.—Your insertion of this note will much oblige

*Carey Street,* Your humble servant,

*20th August,* 1800. WENTWORTH MALIM.

*Observations by the Editors.*

Many cases have occurred of the same kind as that related by Mr. Malim: but they do not appear to us deserving of particular attention. We should expect *à priori* that persons who had been subjected to the effluvia of the small-pox, though afterwards inoculated for the cow-pox, would receive the variolous infection, and go through the disease. This fact, however, does not lessen the importance of the vaccine inoculation, nor tend to discredit the position which its advocates have advanced; since it still remains a certain preventive of the small-pox, where this disorder has not previously been communicated.

ART.

Art. 6. *Reflections on the Use of caustic Substances and metallic Bougies in Strictures of the Urethra.* By Mr. BLAIR, Surgeon of the Lock Hospital and Asylum, and of the Finsbury Dispensary, &c.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

IT has been often remarked in surgery, and in other practical professions, that attempts at improvements are considered by timid persons as hasty and unwarranted innovations. This caution, when properly limited and applied, may answer a good purpose; by inducing men qualified for the task, to examine with accuracy and deliberation into the improvements proposed, and prevent the obtrusion of those which will not bear the test of rigid inquiry. For a man to condemn or approve hastily, without a previous knowledge of the subject, nothing else is required than a common stock of prejudice: but to form a correct and independent opinion sometimes calls for more judgment and firmness than many possess; and to appreciate the treatment recommended for an intricate disease, demands greater opportunities and skill than fall to the lot of every practitioner.

These observations apply with peculiar propriety to the subject on which I have ventured to offer a few cursory hints. The treatment of diseases of the urethra, especially in this vast metropolis, forms an important and extensive branch of surgical practice. Various opinions prevail among professional men concerning the best mode of curing those complaints: but too commonly, I fear, the conduct of surgeons in this respect is regulated much more by fashion or prejudice than by well-established facts. The proposal of applying caustic substances to strictures in the urethra originated, I think, about two hundred and sixty years ago, with Alderetus, Professor of Medicine at Salamanca: his pupil, Amatus Lusitanus, has written upon the practice; and, after him, various

authors have noticed this subject, to the present time. The clumsy and indiscreet manner in which the caustic was employed, however, occasioned it to be condemned and discontinued by surgeons in general, until its late revival by Mr. John Hunter.

It would lead me into too wide a field of inquiry to state the various methods used by our predecessors in the application of escharotic substances, and the different circumstances under which they had recourse to these active remedies. On a future occasion, I shall probably resume the subject, and treat on it more at large. But for the information of those who may wish to tread in the steps of Mr. Hunter, I think it right to mention that this celebrated surgeon used to apply the caustic "in those cases *only* that did not admit the smallest bougie to pass; in which, therefore, no mode of relief, without having recourse to a very severe operation with the knife, was at that time known." Since Mr. Hunter's decease, the caustic has been used much more freely and incautiously than, in my opinion, it ought; and, as many accidents have ensued from the practice, occasion has thereby been given to clamorous and unqualified persons to decry the caustic altogether in strictures of the urethra.

Some writers have unreasonably magnified the dangerous consequences of the caustic, and attributed to its *use* what only ought to be ascribed to the *abuse* of it. We are told, that its effects ought "to make all humanity shudder;" that it is a "barbarous and irrational practice," such as "none but the proud, the conceited, and obstinate," will have recourse to! This intemperate language can only be the result of an ill-directed zeal, not founded on actual observation. Are there no cases in which the common bougies have completely failed? and in which we have positively no other resourse than the knife or the caustic? Have not multitudes of persons been relieved, and a great number radically cured, by the caustic, after mild methods had entirely failed? If no other evidence existed, Mr. Home's collection of facts would decidedly

cidedly prove the affirmative. And, in addition to these, I may add the successful experience of many other surgeons now living; as well as my own, the result of nearly an hundred and fifty trials. Notwithstanding the declamation of prejudiced and inexperienced men, therefore, we ought not hastily to conclude that caustic bougies should be for ever banished from this line of practice.

I do not mean to question the truth of the tragic stories, some of them at least, which have been related; but I must beg leave to suggest that I have never but once (and then from the patient's indiscretion) seen any serious or distressing symptoms follow the application of the caustic. This felicity cannot be imputed to superior skill or dexterity. I take no such merit to myself. But, if I have been more fortunate than some of my brethren, it probably has arisen from the careful manner in which I conduct the curative process; especially, it has been my uniform endeavour to guard against the mischief that might be produced by an ill-constructed instrument —a precaution which has not always been taken by others.

The mode of preparing and arming the bougie is as follows: Having provided myself with a common plaister bougie, of the largest size and of a firm consistence, I cut off a small portion from its lesser extremity, in order to afford a flat surface and a more secure reception for the caustic. I then bore a hole with a conical iron pin, sufficiently deep to admit a small piece of caustic, cast in a mould formed on purpose; and afterwards compress and roll the sides of the bougie as firmly and smooth as possible, so that the caustic is only visible at its anterior flat surface. The cerecloth will adhere so closely around the caustic, and so completely defend the urethra in using, that there is no risk whatever of its slipping out or otherwise disappointing the views of the operator. This mode of introducing the caustic, first suggested by Mr. Hunter, is undoubtedly superior to any other which has hitherto been proposed, not even excepting that of applying it through a flexible

flexible metallic tube. Respecting the comparative advantages of the metallic and elastic bougies, whether hollow or solid, I shall beg leave to subjoin a few words.

I have not now stepped forward with the view of combating or supporting the particular opinions of any person whoever; but as the real merits of caustic bougies can only be appreciated by the collective experience of surgical practitioners, I thought my example might induce some of your numerous correspondents to communicate the general result of their trials. In stating the event of unsuccessful cases, it is absolutely necessary to detail the precise circumstances of the disease and the manner of treatment: for, we have reason to believe, that many of the failures and bad consequences we hear of, should be imputed to the mismanagement of the operator or patient, rather than to the inevitable tendency of the instrument itself. It is certain that mild and happy effects have often ensued from the use of the caustic, when the common means had proved useless; and that permanent benefit has been received from it in two or three weeks, although the plaister bougie had been previously employed, even for years together, without making any progress towards a cure. After all, however, it must be granted by the warmest advocates for this treatment, that *where the bougie is capable of dilating the urethra to its natural size, it is to be preferred, as more simple and less alarming; in general too, the latter is not so painful in its application as the caustic.*

*** We are obliged, for want of room, to withhold the concluding part of Mr. BLAIR's paper until our next Number.

---

Art. 7. *An Account of the various medical and surgical Lectures in London.*

WE lately promised to furnish our readers, in our Review for September next, with an account of the time when the professors

fessors and teachers in England and Scotland would commence their autumnal courses of lectures on the different branches of medical education. But, having already received the following obliging communications, with a request from some of the gentlemen that we would announce them in the present number, we have thought it better to insert all those which have come to hand. An account of the commencement of the lectures at Edinburgh, and in various other parts, which are not yet communicated, will be given in our next. At the same time we mean to announce when the several medical societies begin their sessions, with the days and hours of meeting of those which do not adjourn during the summer.

*Medical Theatre at St. Bartholomew's Hospital.*

The following courses of lectures will be delivered in this theatre during the ensuing winter:

On the Theory and Practice of Medicine, by Dr. ROBERTS—Natural and morbid Anatomy, and Physiology, by Mr. ABERNETHY—The Theory and Practice of Surgery, by Mr. ABERNETHY—Chemistry and the Materia Medica, by Dr. POWELL—Midwifery, and the Diseases of Women and Children, by Dr. THYNNE. Further particulars may be known by applying to Mr. NICHOLSON, Apothecary at the Hospital.

*At St. Thomas's and Guy's Hospitals.*

The lectures for the ensuing season will commence at the united Hospitals in the following order:

THEATRE, ST. THOMAS'S HOSPITAL. Anatomy and Surgery, on Wednesday, October 1, at one o'clock, by Mr. CLINE and Mr. ASTLEY COOPER.

THEATRE, GUY'S HOSPITAL. Theory and Practice of Medicine, on Friday, October 3, at ten o'clock in the morning, by Dr. BABINGTON—Midwifery, and Diseases of Women and Children, on Saturday, October 4, at eight in the morning, by Dr. LOWDER and Dr. HAIGHTON—Chemistry and Experimental Philosophy, on the same morning at ten, by Dr. BABINGTON and the Rev. Mr. ROBERTS—Physiology, or Laws

of

of the animal Economy, on Monday, October 6, at a quarter before seven in the evening, by Dr. HAIGHTON—Therapeutics and Materia Medica, on Thursday, October 9, at seven in the evening, by Dr. CURRY—Principles and Practice of Surgery, on Monday, October 13, at eight in the evening, by Mr. ASTLEY COOPER; Mr. Cooper will also deliver a course of lectures on select surgical cases in the Hospital.

In addition to these, early in October a course of clinical lectures will be begun by Dr. SAUNDERS and Dr. BABINGTON, and continued through the season. Conditions: 1. Clinical pupils to pay five guineas for each course, which will commence in October and end in May; the first four months to be conducted by Dr. Saunders, the next by Dr. Babington. 2. No person to be accepted as a clinical pupil, who is not entitled to attend the lectures on the Practice of Medicine during the time the clinical course will continue. 3. Clinical pupils to have the privilege of going into the clinical wards only, unless they are likewise pupils either to the physicians or surgeons of the Hospital. 4. Gentlemen entering to the physicians as perpetual pupils, or for twelve months, to have the benefit of the clinical lecture without additional expense. —Terms of attending as physicians pupils: for six months, ten guineas; for twelve months, fifteen guineas; perpetual, twenty-one guineas.

*At the London Hospital.*

On Wednesday, October 1, the following lectures will commence: Theory and Practice of Physic, by Dr. COOKE —Chemistry, by Drs. HAMILTON and FRAMPTON—Clinical Lectures, by Drs. COOKE, HAMILTON, and FRAMPTON— Anatomy, Physiology, and the Principles and Operations of Surgery, by Mr. BLIZARD and Mr. THOMAS BLIZARD—Anatomical Demonstrations daily, by Mr. HEADINGTON.

Dr. DENNISON and Dr. SQUIRE will commence their lectures on the Theory and Practice of Midwifery, and the Diseases of Women and Children, in the following order: Dr. Dennison,

Dennison, at the London Hospital, on Wednesday, October 1, at eleven in the forenoon—Dr. Squire, on the same day, at seven in the evening, at his house, No. 7, Ely Place, Holborn. In addition to a constant supply of labours, gentlemen may have frequent opportunities of visiting patients in disorders during pregnancy, and after delivery.

*Lectures by George Fordyce, M. D. F. R. S. and senior Physician of St. Thomas's Hospital.*

The autumn courses will begin at Dr. FORDYCE's, Essex Street, Strand, on Monday, October 6; the spring courses will begin the first Monday in February. 1. CHEMISTRY: the conditions are, three guineas for one course—2. PRACTICE OF PHYSIC, three guineas for one course: gentlemen subscribing for two courses are perpetual pupils, and have a right to attend the lectures on Chemistry, or Materia Medica—3. MATERIA MEDICA, three guineas for one course; gentlemen subscribing for two courses are perpetual pupils, and have a right to attend the lectures on Chemistry, or the Practice of Physic. Perpetual pupils to the Materia Medica, Practice of Physic, and Chemistry, pay nine guineas; perpetual pupils to the Materia Medica and Practice of Physic, the Materia Medica and Chemistry, or the Practice of Physic and Chemistry, or to the lectures on any one of these subjects, pay six guineas. The Practice of Physic at eight in the morning, the Chemistry at nine, and the Materia Medica will be continued at seven in the evening.

*Lectures by Dr. Pearson.*

The medical and chemical lectures by G. PEARSON, M. D. F. R. S. of the College of Physicians, and senior Physician to St. George's Hospital, will commence the first week of October next, at the Laboratory, Whitcomb Street, Leicester Square, at the usual morning hours, viz. the Materia Medica at a quarter before eight, the Practice of Physic at half after eight, and the Chemical Lecture at a quarter after nine. Every Saturday morning a clinical lecture, on the patients of St. George's Hospital, is given, at nine o'clock.

*Medical*

*Medical and Chemical Lectures by Alexander Crichton, M. D. F. R. S. &c.*

On Monday, October 13, Dr. CRICHTON will commence his usual autumnal course of lectures on the Theory and Practice of Physic, Chemistry, and Materia Medica. The lectures will be delivered at his house in Clifford Street, Bond Street, where further particulars may be obtained.

*Dr. Bradley and Mr. Pole, in Leadenhall Street.*

Dr. BRADLEY will commence his autumnal course of Lectures, on the Theory and Practice of Medicine, on Monday, October 6, at the lecture-room, No. 102, Leadenhall Street, near the Royal Exchange, at six in the afternoon.

On the 9th day of October, Mr. T. POLE, accoucheur to the Obstetric Charity for the Delivery of poor Women at their own Habitations, will commence his autumnal course of lectures on the Theory and Practice of Midwifery, including the Diseases of Women and Children, at his house, No. 102, Leadenhall Street.

*Dr. Osborn's and Dr. Clarke's Lectures.*

The lectures on the Principles and Practice of Midwifery, and the Diseases of Women and Children, by WILLIAM OSBORN, M. D. and JOHN CLARKE, M. D. Licentiate in Midwifery of the College of Physicians, Physician to the Asylum for female Orphans, and to the Infant Asylum, will begin on the first Monday in October, at half past ten in the morning. Terms of attending the lectures: first course, four guineas; second course, three guineas; third, and every subsequent course, two guineas; three courses subscribed for at once, eight guineas; six courses subscribed for at once, nine guineas; perpetual pupil, ten guineas. Gentlemen settled in London, who are desirous of occasionally attending the lectures, will be considered as perpetual pupils for five guineas. A similar indulgence will be extended to gentlemen who have actually served in the army or navy, who will be admitted to attend three courses for seven guineas, or six courses for eight guineas. The lectures are read at the house of Dr. Clarke,

No.

No. 1, New Burlington Street, in the winter season, from half past ten in the morning to half past eleven. The times of beginning the different courses are early in October, the beginning of December, the middle of January, and the middle of March.

*Dr. Lowder and Dr. Haighton, on Midwifery, &c.*

Dr. LOWDER and Dr. HAIGHTON, during the winter, give two evening courses; their first commencing early in October, and their second early in February, at Dr. Haighton's house in St. Saviour's Church-yard.

*Dr. Batty's obstetrical Lectures.*

Dr. BATTY will begin his course of lectures on the Theory and Practice of Midwifery, and on the Diseases of Women and Children, on Monday, October 6, at eleven o'clock in the morning, at his house, No. 6, Great Marlborough Street, where further particulars may be seen.

*Mr. Pearson's surgical Lectures.*

On Monday, October 6, at seven in the evening, the autumn course of lectures, on the Principles and Practice of Surgery, will commence (in Golden Square) by JOHN PEARSON, Surgeon of the Lock Hospital and Asylum, and of the public Dispensary. Gentlemen who attend these lectures may have the advantage of exemplifying the general doctrines they shall hear delivered, by attending the chirurgical practice at the Dispensary, on moderate terms. The terms of attendance are, for one course of lectures, three guineas; two courses, six guineas: the gentleman will then be considered as a perpetual pupil. Two courses will be given each year; the first course commencing in October, the second course the beginning of February.

*Mr. Wilson's anatomical Lectures in Great Windmill Street.*

Two courses of lectures are read during the winter and spring seasons; one course beginning on October 1, and terminating on January 18; the other course beginning on January 19, and terminating towards the middle of May. In each

course is explained the structure of every part of the human body, so as to exhibit a complete view of its anatomy, as far as it has been hitherto investigated; to which are added, its physiology and pathology; after which follow lectures on surgery; and the course concludes with the anatomy of the gravid uterus. A room is likewise open for dissections, under the superintendance of Mr. WILSON and Mr. THOMAS, from nine o'clock in the morning till two in the afternoon, from October 10 till April 20; where regular and full demonstrations of the parts dissected are given; where the different cases in surgery are explained, the methods of operating shewn on the dead body; and where also the various arts of injecting and making preparations are taught. Conditions: first course of lectures, five guineas; second course, four guineas; third course, three guineas. After this, a pupil has the privilege of attending the lectures as long as he pleases, without any additional expense; or by paying ten guineas at first, he becomes entitled to the same privilege. First course of Dissections, three guineas; second course, three guineas; third course, three guineas; fourth course, three guineas. After this, a pupil has the privilege of attending the dissections as long as he pleases, without any additional expense; or by paying ten guineas at first, he becomes entitled to the same privilege. Further particulars may be known by applying to Mr. Wilson, No. 11, Argyll Street, Hanover Square.

*Mr. Chevalier's surgical Lectures.*

On Monday, October 6, Mr. CHEVALIER will begin his next course of lectures on the Principles and Operations of Surgery, at his house, No. 20, in South Audley Street, Grosvenor Square: the terms of attendance are three guineas for the course.

*Mr. Carpue's anatomical Lectures.*

Mr. CARPUE will continue his private anatomical lectures, at his house, No. 44, Leicester Square. Particulars may be known by applying as above.

Art.

Art. 8. *Monthly Catalogue of new and intended Publications.*

NEW BRITISH PUBLICATIONS.

1. MEMORIAL concerning the present State of military and naval Surgery. Addressed, several Years ago, to the Right Honourable Earl Spencer, First Lord of the Admiralty; and now submitted to the Public. By JOHN BELL, Surgeon, of Edinburgh. Octavo. 42 pages. London, Longman and Rees. 1800. Price 1*s.* 6*d.*

2. Memorial to the Managers of the Royal Infirmary. By JAMES GREGORY, M. D. &c. Quarto. 260 pages. Edinburgh, printed by Murray and Cochrane. 1800.

3. A Treatise on the chemical History and medical Powers of some of the most celebrated mineral Waters, with practical Remarks on the aqueous Regimen. To which are added, Observations on the Use of cold and warm Bathing. By WILLIAM SAUNDERS, M. D. F. R. S. &c. Octavo. 483 pages. London, Philips. 1800. Price 8*s.*

4. A practical Inquiry into disordered Respiration, &c. Second Edition, corrected. By R. BREE, M. D. of Birmingham. Octavo. London, Robinsons. 1800. Price 5*s.*

5. The Doctrine of Phlogiston established, and that of the Composition of Water refuted. By JOSEPH PRIESTLEY, L. L. D. Octavo. 1800. Price 2*s.* 6*d.*

6. Dissertatio de Febribus intermittentibus præcipue medendis. Auctore HENRICO XAVIER BAETA, Lusitano. Octavo. 68 pages. Edinburgh, Pillans. 1800.

NEW FOREIGN PUBLICATIONS.

7. Histoire Naturelle de Buffon, classée par Ordres, Genres, et Espèces, d'après le Systême de Linné; avec les Caractères génériques et la Nomenclature Linnéene. Par RENE-RICHARD CASTEL, Auteur du Poëme des Plantes et Professeur au Prytanée Français. Ornée des 205 planches, 26 vols. 18mo. Déterville, Paris. An VIII.

8. Dissertations sur les Fiévres bilieuses, et Histoire de l'Epidémie bilieuse qui regna à Lausanne en 1755. Par A. S. D. TISSOT. Traduit du Latin, avec quelques Additions, par MAHOT, M. D. 12mo. 360 pages. Paris, chez Gabon. An VIII.

9. Recherches anatomiques sur la Position des Glandes, et sur leur Action. Par THEOPHILE BORDEU. Nouvelle Edition. Duodecimo. 500 pages. Paris, Gabon. An VIII.

10. Histoire Naturelle des Salamandres de France, précédée d'un Tableau méthodique des autres Reptiles indigènés, avec Figures coloriées. Par LANEILLE, Membre associé de l'Institut National, &c. Paris. An VIII.

11. Récréations tirées de l'Histoire Naturelle. Par WILHELM. Traduites de l'Allemand. Classes des Insectes. Cinquieme et sixieme Cahiers, orné de dix-huit planches. Le six Cahiers forment le premier Tome, et contiennent 48 planches. Paris. An VIII.

12. Traité sur le Sang, l'Inflammation, et les Plaies des Armes à Feu, de J. Hunter. Par DUBAR, Officier de Santé. Three volumes 8vo. Paris. An VIII.

13. Dissertations sur les Fièvres pernicieuses, ou Ataxiques intermittentes. Par C. ALIBERT, M. D. &c. Paris, chez Richard. An VIII.

14. Esquisse d'un Cours d'Hygiène ou de Médécine, appliquée à l'Art d'user de la Vie et de conserver la Santé: extrait d'une Partie des Leçons d'Hygiène, faites pour la premiere Fois au Lycée Républicain, l'An VII. Par J. F. MOREAU de la Sarthe, M. D. &c. Paris, Gabon.

15. Lettres sur l'Efficacité de la Solution balsamic styptique de M. le Chevalier RUSPINI. Traduites de l'Anglois par M. CLEMENCE. Octavo. 60 pages. 1800.

16. Mémoires de Médécine pratique, sur le Climat et les Maladies du Mantouan, sur le Quinquina, sur la Cause fréquente des Diarrhées chroniques des jeunes Soldats, et sur l'Epidémie actuelle de Nice. Par F. E. FODÉRÉ, Auteur du

Traité de Médécine légale et hygiéne publique, &c. Octavo, 175 pages. Paris, Croullebois. 1800.

17. Traité élémentaire et complet d'Ornithologie, ou Histoire Naturelle des Oiseaux. Par P. M. DAUDIN. Tom. II. Quarto. 476 pages. Paris, Fuchs.

18. Manuel tabacal et sternutatoire des Plantes, ou Traité du Tabac et des differentes Plantes qui sont propres à faire éternuer. Par J. P. BUC'HOZ. Octavo. 102 pages. Paris, Croullebois. 1800.

19. Manuel floréal des Plantes; ou Traité de toutes les Plantes qui peuvent servir d'Ornement dans les Jardins, &c. Par J. P. BUC'HOZ. Octavo. 285 pages. Paris, Fuchs.

20. Umriff des Justandes der Wundarzneykunst beyden alten Roemen vorzuglich zu den Reiten des Celsus durch Erlaeuternde Anmerkungen mit der heutigen Wundarzeneykunst verglichen und Anwendbar gemacht; *i. e.* An historical Sketch of the Science of Surgery among the ancient Romans, particularly during the Time of Celsus, compared with the modern Practice of Surgery, and rendered applicable by explanatory Notes. By JOHANN. CHRIST. JACGER. With a Preface by Dr. PRUNER. Second improved Edition. 1799. Frankfurt, by Jager.

21. Bibliothek der practischen Heilkunde; *i. e.* A Library of practical Medicine. By HUFELAND. Vol. I. Jena. 1799. Octavo. Imported by Geisweiler.

22. Auszug Swedischer Annalen der Medicin und Naturgeschichte; *i. e.* Extracts from the Swedish Annals of Medicine and Natural History. By RUDOLPH. Vol. I. Berlin. 1799.

23. Beyträge zur pratischen und gerichtlichen Arzneykunde; *i. e.* Contributions to practical and forensic Medicine. By D. JOHANN CHRISTOPH. FAHNER. 1799. Stendal.

24. Taschenbuch fur gerichtliche Aertze und Wundarzte, &c.; *i. e.* Almanack for juridical Physicians and Surgeons, &c. By AUGUSTUS ROOSE. Brunswick. 1800.

25. Neues

25. Neues Edinburger Dispensatorium nach der vierten Ausgabe, &c.; *i. e.* New Edinburgh Dispensatory. Translated from the English, with Additions, by D. SAMUEL HAHNEMANN. Fourth Edition. Vols. I. and II. 1800.

26. Medicinische National Zeitung; *i. e.* Medical National Gazette. By Dr. PIERER. Berlin. 1800.

27. Entomologische Versuche; *i. e.* Entomological Essays. By CHRISTIAN CREUTZ. 1799.

28. Pathologie oder Krankheitslehre; *i. e.* Pathology. By E. H. SCHMIDT. Vienna. 1799.

29. Beschreibung des botanischen Gartens der Universitat zu Halle; *i. e.* A Description of the botanical Garden of the University of Halle. 1799-1800.

30. Beytraege zur erweiterung und berichtigung der Chimie; *i. e.* Contributions tending to enlarge the Knowledge of Chemistry. By M. BUCHOLZ, Apothecary at Erfurt. 1800.

31. Practische Beytraege zur Geschichte der Kuh und Kinder-poken; *i. e.* Practical Contributions to the History of the Cow-pox and Small-pox. By J. EYEREL. Vienna. 1800.

32. Kürtzer Inbegriff der Lehre von der Lustseuche; *i. e.* Brief Introduction to the Knowledge of the Lues Venerea. By METZGER, M. D. Leipzig. 1800.

33. System der practischen Heilkunde. Ein Handbuch fur Academische Vorlesungen; *i. e.* A System of practical Medicine, intended as a Manual or Text-book for academical Lectures. By Dr. HUFELAND. Octavo. Jena. 1800.

34. Beytraege zur nähern Kenntniss des Galvanismus; *i. e.* Contributions to the Knowledge of Galvanism, for Physicians and Chemists. By T. W. RITTER. Jena. 1800.

## INTENDED PUBLICATIONS.

35. In the press, an Essay on Phlegmatia Dolens, or the painful Swelling of the lower Extremities incident to lying-in Women.

Women. In which a literary history of this disease, comprehending a review of the different theories that have been formed concerning it, from the earliest records of medicine to the present time, will be given; and its analysis with peritonitis puerperalis, or child-bed fever, will be pointed out and elucidated by a comparison of their symptoms, terminations, predisposing, remote, and proximate causes, and their cure. By Dr. HULL, of Manchester.

36. The same Author has prepared for the press, an Epitome of the Nosologia Methodica of Sauvages, which is intended to be published by subscription. The Proposals and a Prospectus of the work will appear in a few weeks.

37. Mr. RING, Surgeon, is said to be writing a Treatise on the Cow-pox.

38. Another volume of Mr. JOHN BELL's Anatomy is in considerable forwardness.

39. Mr. SAVIGNY intends to publish an Appendix to his Engravings of chirurgical Instruments, and will probably continue to make other additions every succeeding year.

40. A Description is preparing for the press of four living human Monsters; together with an Account of a singular Case of Elephantiasis; and of two remarkable Cases of Epilepsy, one of which was connected with Catalepsy. Illustrated by five plates. By Dr. FRANZ BOUTTATZ, of Moscow.

41. In the press, Observations on the Effects of Sea-bathing and Sea-breezes, in a Series of Letters to a Physician in London. By A. P. BUCHAN, M.D.

42. The first volume of a new Medical Dictionary will soon be published by the celebrated Dr. HUFELAND.

43. Dr. SCHMIDT of Osnaburgh is said to be printing an Account of a remarkable Imposition, (See our second volume, p. 484.) carried on by a person who was supposed to have lived many months without food or drink.

44. Dr. WALCOT, *(alias* Peter Pindar) the well-known satirist,

tirist, is preparing for the press a work on the Causes and Treatment of Deafness.

45. Speedily will be published, by Mr. KENTISH, a Second Essay on Burns, in Reply to Mr. Earle's late Tract on the same subject.

46. The Second Volume of Dr. SHAW's Zoology, in two parts, is in great forwardness.

---

Art. 9. *Answers to Readers and Correspondents.*

1. A CORRESPONDENT, who signs himself CANDIDUS, after passing some strictures on a late publication on the Asthma, by Dr. Bree, expresses a wish "that some physician would undertake the trouble of republishing Floyer's valuable Treatise on the Asthma, with such notes and illustrations as the progress which medicine has made since the days of Floyer would suggest. We are confident," he adds, "that such an edition would have a very extensive sale."

2. JUVENIS will find in our present Number the account which he inquires for, of the time when the anatomical and chirurgical lectures commence in London.

3. We shall be happy to insert the Communication alluded to by R. H. in his last letter.

4. Mr. BLAIR's note on the operation of trepanning the Sternum, and that of Mr. RING on the Cow-pox, have been received, and will be inserted next month.

5. The Queries of MEDICUS arrived too late to be answered in our present Number.

6. In order to facilitate the reception of their favours, we particularly request all our Correspondents to address the *Editors of the London Medical Review and Magazine, No. 8 Little Queen Street, Holborn*; by which means their obliging communications will not be interrupted, but immediately come to hand.

Fig. 1.



Fig. 2.

Herring del.

J. Wilkes sc

# A Diseased Testicle &c.

# THE LONDON MEDICAL REVIEW AND MAGAZINE.

VOL. IV. N° XIX. SEPTEMBER MDCCC.

## ANALYSIS OF BOOKS.

ART. I. *Philosophical Transactions of the Royal Society of London, for the Year* 1800. *Part I.* 4to. 264 pages. ELMSLEY, London. Price 15*s*.

THIS publication contains eleven articles; the first of which is *On the Structure and Uses of the Membrana Tympani of the Ear*, by EVERARD HOME, Esq. F. R. S.

The membrana tympani has always been considered as a common membrane, which, by means of muscles belonging to the malleus being stretched or relaxed, became fitted, in its various degrees of tension, to convey the vast variety of external sounds to the internal organ. Its shape, situation, and office, have procured it the name of drum of the ear; and the muscles of the malleus having been deemed sufficient for bracing and unbracing it, less attention was bestowed on the

structure of the membrane itself: to which may be added, that in the human ear, and generally in the ear of quadrupeds, the membrane is so extremely small and thin, and in its situation so peculiarly confined, as not to be got at for inspection but with much difficulty.

The case is different in the elephant, where this membrane is so very large, that the parts of which it is composed are readily distinguished: they are even conspicuous to the naked eye; and muscular fibres are seen passing along the membrane, in a radiated manner, from the bony rim which surrounds it, towards the handle of the malleus, to which the central part of the membrane is firmly attached.

An opportunity having occurred to the author of examining part of an elephant's head, preserved in spirits, he found the membrane of an oval form; the short diameter of the oval being rather more than an inch in length; the long diameter an inch and $\frac{7}{20}$ths.

In the human ear, the membrana tympani is nearly circular; the longest diameter is $\frac{8}{20}$ths of an inch; the shortest $\frac{7}{20}$ths.

As the membrane in the elephant exceeds that of the human ear in thickness as much as in extent, which is as the squares of their diameters, or in the proportion of one hundred and thirty-five to fourteen, it is natural to conclude that the muscular fibres, which are to stretch the one, must greatly exceed in strength those capable of producing the same degree of tension in the other.

From this statement, the muscular structure in the human membrana tympani will necessarily be so much less distinct than in the elephant, as scarcely to be visible to the naked eye, and will easily be overlooked by the most attentive observer, who is not directed by some previous information to examine it under the most favourable circumstances; but, when these are attended to, it can be perceived without the aid of glasses.

If the membrana tympani of the human ear be completely exposed on both sides, by removing the contiguous parts, and the cuticular covering is carefully washed off from its external surface, then, by placing it in a clear light, the radiated direction of its fibres may be easily detected. If a common magnifying glass be used, they are rendered nearly as distinct as those of the elephant appear to the naked eye; their course is exactly the same; and they differ in nothing but in being formed upon a smaller scale.

When viewed in a microscope magnifying twenty-three times, Mr. Home observes, the muscular fibres are beautifully conspicuous, and appear uniformly the same throughout the whole surface, there being no central tendons, as in the diaphragm; the muscular fibres appear only to form the internal layer of the membrane, and are most distinctly seen when viewed on that side.

In examining this membrane in different subjects, the parts were frequently found in a more or less morbid state. In one instance the membrane was found loaded with blood-vessels, was less transparent than usual, and was united by close adhesion to the point of the long process of the incus. In another instance, there was a preternatural ossification adhering to it, at a small distance from the end of the handle of the malleus.

As muscles in general are supplied with blood-vessels in proportion to the frequency of their action, it is an object of importance to determine the vascularity of the membrana tympani. Upon this subject, the author's want of information has been amply supplied by Dr. Baillie, who, in a communication upon this subject, shewed him a preparation of the membrane, in which the vessels had been most successfully injected with coloured wax.

In this preparation, the most beautiful of the kind he ever saw, the vessels in their distribution resembled those of the iris, and were nearly half as numerous: they anastomosed with one another in a similar manner, and their general direction

was from the circumference to the handle of the malleus; from near this handle, a small trunk sent off branches in a radiated manner, which anastomosed with those which had an opposite course.

This correspondence, in the number and distribution of blood-vessels, between the membrana tympani and the iris, is a strong circumstance in confirmation of that membrane being endowed with muscular action.

In the horse, the membrana tympani is smaller than in man; its long diameter is $\frac{8}{20}$ths of an inch; the short one $\frac{6}{20}$ths; and it is almost quite flat, while in man it is concave, which makes the difference of extent considerably exceed the difference in the diameters. In the horse, the fibrous structure is not visible to the naked eye; it is even indistinctly seen when viewed through a common magnifying glass; but in a microscope it is very visible, and in every other respect agrees in structure with the membrane in the human ear, and in that of the elephant.

In birds, the membrana tympani is larger in proportion than in the quadruped, and more circular in its shape.

In the goose it is $\frac{6}{20}$ths of an inch in its longest diameter, and $\frac{5}{20}$ths in its shortest diameter. In the turkey, $\frac{7}{20}$ths by $\frac{5}{20}$ths. It is thinner in its coats in birds than in the horse, and to the naked eye has no appearance of fibres; but, when viewed in a microscope, there is a visible radiated structure, not very unlike the wire-marks upon common writing-paper.

The knowledge of a muscular structure in the membrana tympani enables us to explain many phenomena in hearing, which have not hitherto been accounted for in a satisfactory manner. It is principally by means of this muscle the author says, that accurate perceptions of sound are communicated to the internal organ, and that the membrana tympani is enabled to vary the state of its tension, so as to receive them in the quick succession in which they were conveyed to it.

In the human ear, and in that of birds, the radiated fibres

of

of the membrana tympani have their principal attachment to the extremity of the handle of the malleus, which is nearly in the centre of the membrane.

In the membrane of the elephant, which is oval, the attachment to the handle of the malleus is at some distance from the centre. In the horse, deer, and cat, which have the membrane still more oval than the elephant, the handle of the malleus is situated in the long axis of the membrane, with its extremity extending beyond the centre, reaching nearer to the circumference; and the fibres of the radiated muscle are not only attached to its end, but also laterally to nearly the whole length of its handle.

This oval form of the membrana tympani, in those quadrupeds, and the very extensive attachment of the fibres of the radiated muscle to the handle of the malleus, may be the reason why their ears are not equally fitted to hear inarticulate sounds, as the ears of birds and of man.

Should this radiated muscle of the membrana tympani (which is probably the smallest in the body that has a distinct action) be thought too insignificant to have an office of so much consequence assigned to it, let it be remembered, that the size of muscles is no indication of their importance, but only of the resistance to be overcome by their action; and that the more delicate actions are performed universally in the body by very small muscles, of which the iris in the eye furnishes a very conspicuous example.

Before the author explains the mode in which the radiated muscle adapts the membrana tympani to different sounds, he enumerates the more important parts of the organ of hearing in perfect animals, and their several uses. In doing this, however, he points out what particulars of the commonly received theory are defective, and admit of improvement.

"It is true," he says, "that the membrana tympani is stretched and relaxed by the action of the muscles of the malleus, but not for the purpose alleged in the commonly received

ceived theory. It is stretched in order to bring the radiated muscle of the membrane itself into a state capable of acting, and of giving those different degrees of tension to the membrane which empower it to correspond with the variety of external tremors: when the membrane is relaxed, the radiated muscle cannot act with any effect, and external tremors make less accurate impressions.

"The membrana tympani, with its tensor and radiated muscles, may not be unaptly compared to a monochord, of which the membrana tympani is the string; the tensor muscle the screw, giving the necessary tension to make the string perform its proper scale of vibrations; and the radiated muscle acting upon the membrane like the moveable bridge of the monochord, adjusting it to the vibrations required to be produced. The combined effects of the action of these muscles give the perception of grave and acute tones; and, in proportion as their original conformation is more or less perfect, so will their actions be, and, consequently, the perceptions of sound which they communicate.

"This mode of subdividing the motions of the membrana tympani between two sets of muscles, allotting a portion to each, is not peculiar to this part. A remarkable instance of it appears in the rapid movements of the fingers, in performing several actions, and particularly in playing on a musical instrument. In all such rapid motions, the fingers are bent to a certain degree by the long muscles that lie upon the forearm, to the tendons of which a set of small muscles are attached, called lumbricales. These last are unable to produce any effect on the fingers, till elongated in consequence of the action of the long muscles in bending the other joints; the lumbricales then become capable of bending the fingers a little more, and of acting with great rapidity. It is a curious circumstance, that a similar application of muscles should be employed to fit the fingers to produce a quick succession of sounds, and to enable the ear to be impressed by them.

"From

"From the explanation given of the adjustment of the membrana tympani, the difference between a musical ear and one which is too imperfect to distinguish the different notes in music, will appear to arise entirely from the greater or less nicety with which the muscle of the malleus renders the membrane capable of being truly adjusted. If the tension be perfect, all the variations produced by the action of the radiated muscle will be equally correct, and the ear truly musical; but, if the first adjustment is imperfect, although the actions of the radiated muscle may still produce infinite variations, none of them will be correct: the effect, in this respect, will be similar to that produced by playing upon a musical instrument which is not in tune. The hearing of articulate sounds requires less nicety in the adjustment than of inarticulate or musical ones: an ear may therefore be able to perceive the one, although it is not fitted to receive distinct perceptions from the other.

"The nicety or correctness of a musical ear being the result of muscular action, renders it, in part, an acquirement; for, although the original formation of these muscles in some ears renders them more capable of arriving at this perfection in their action, early cultivation is still necessary for that purpose; and it is found that an ear, which upon the first trials seemed unfit to receive accurate perceptions of sounds, shall, by early and constant application, be rendered tolerably correct, but never can attain excellence. There are organs of hearing in which the parts are so nicely adjusted to one another, as to render them capable of a degree of correctness in hearing sounds which appears preternatural.

"Children who, during their infancy, are much in the society of musical performers, will be naturally induced to attend more to inarticulate sounds than articulate ones, and by these means acquire a correct ear, which, after listening for two or three years to articulate sounds only, would have been attained with more difficulty.

"This

" This mode of adapting the ear to different sounds, appears to be one of the most beautiful applications of muscles in the body; the mechanism is so simple, and the variety of effects so great.

" Several ways in which the correctness of hearing is affected by the wrong actions of the muscles of the tympanum, that appeared to be inexplicable, can be readily accounted for, now that the means by which the membrane adjusts itself are understood. The following are instances of this kind.

" *Case* 1.—A gentleman, 33 years of age, who possessed a very correct ear, so as to be capable of singing in concert, though he had never learned music, was suddenly seized with a giddiness in the head, and a slight degree of numbness in the right side and arm. These feelings went off in a few hours, but on the third day returned, and for several weeks he had returns of the same sensations. It was soon discovered that he had lost his musical ear: he could neither sing a note in tune, nor in the smallest degree perceive harmony in the performance of others. For some time he himself thought he had become a little deaf, but his medical attendant was not sensible of that in conversation. Upon going into the country, he derived great benefit from exercise and sea-bathing.

" Twenty months after the first attack, he was capable of singing a Scotch air with tolerable exactness, though he could not sing in concert. He continued to improve in his health, and in the course of two or three years completely recovered his ear for music.

" In this case there appeared to be some affection of the brain, which had diminished the actions of the tensor muscles of the membranæ tympani, through the medium of the nerves which regulate their actions; this gradually went off, and the muscles recovered their former action.

" *Case* 2.—A young lady was seized with a frenzy which lasted for several years. Previous to her derangement, she

was incapable of singing in tune, from the want of an ear for music; but in the course of her madness she frequently, to the astonishment of her relations, sung a tune with tolerable correctness.

" This case is the reverse of the former; and, as it arose from a directly contrary affection of the brain, may be considered as the result of an unusual degree of action in the tensor muscles, giving the membrane a more correct adjustment than it had before.

" *Case* 3.—An eminent music-master, after catching cold, found a confusion of sounds in his ears. Upon strict attention, he discovered that the pitch of one ear was half a note lower than that of the other; and that the perception of a simple sound did not reach both ears at the same instant, but seemed as two distinct sounds, following each other in quick succession, the last being the lowest and weakest. This complaint distressed him for a long time, but he recovered from it without any medical aid.

" In this case the whole defect appears to have been in the action of the radiated muscle, exerted neither with the same quickness nor force in one ear as in the other, so that the sound was half a note too low, as well as later in being impressed upon the organ.

" This affection of the muscle of the membrana tympani is very similar to an affection of the straight muscles of one of the eyes, producing double vision, which I have noticed in a former lecture, when treating of the wrong actions of that organ. (Vide Philosophical Transactions for the year 1797.)

" In endeavouring to explain the uses of the more internal parts of the ear, considerable advantage may be derived from classing them in two divisions; namely, those which are formed for the purpose of receiving impressions conveyed through the medium of liquid or of solid substances; and those adapted to receive impressions made by the impulses of an elastic fluid, as the common air.

" This can be done very correctly. Fish, which are formed to hear in water, can have only the parts belonging to the first division; while all the parts found in the ears of birds and quadrupeds, that are not met with in fish, must belong to the second.

" In fish, the organ consists of a vestibulum and three semicircular canals, and these are met with in all fish. In some genera there is an external opening, and substances of a hard nature are found lying loose in the vestibulum: these, however, cannot be considered as essential parts of the organ, from their not being common to fish in general.

" Birds have the vestibulum and semicircular canals in common with fish, but they have also a membrana tympani; a slender bone connecting that membrane with the vestibulum; and an Eustachian tube. In birds the membrana tympani is convex externally, being pushed forwards by the end of the slender bone above mentioned.

" In quadrupeds and man, besides the vestibulum and canals met with in fish, the membrana tympani, the bone connecting it with the vestibulum, and the Eustachian tube, found in birds, there is a cochlea. The membrana tympani is either flat or concave externally; the bony connexion between it and the vestibulum is made up of several bones, supplied with muscles to move them in different directions.

" The parts which compose the organ of hearing in fish, must be intended for receiving impressions conveyed through water: those additional parts met with in birds, and the still greater additions which are found in the quadruped and man, must be intended by nature for rendering more perfect the impressions conveyed to the ear through the medium of the external air.

" Fish, from the structure of the organ, can only hear sounds which agitate the water immediately in contact with the head of the fish; so that the impulse is conveyed, without interruption, from the liquid in which they live, to the organ of hearing.

" Man

"Man is capable of hearing in a similar manner to fishes, when a communication of solid parts is kept up between the sounding body and the bones of the skull: experiments of this kind must have been made by many members of this learned Society.

"One of the most common is, applying a watch to the forehead, and stopping the ears, which does not prevent the ticking from being heard: the sound is still more distinct when the watch is applied to the mastoid process. Here, as the sound can neither pass through the meatus externus, nor by the Eustachian tube, while the mouth is kept shut, it evidently must be conducted through the bones of the skull.

"When the sound produced by boiling water is brought to the ear, by one end of an iron rod resting upon the side of the kettle and the other kept in contact with the teeth, the sound is conducted in the same way, although in this case it has by some been supposed to pass through the Eustachian tube.

"In this mode of hearing, the vestibulum and semicircular canals are probably the only parts of the organ which are necessary to convey the impression to the expansion of the auditory nerve.

"In hearing in air, the use of the membrana tympani in man and quadrupeds has already been explained. Its office in birds is precisely the same; but as in birds this membrane has no tensor muscle to vary its adjustment, but is always kept tense by the pressure of the end of the slender bone, the scale in birds cannot descend so low as in the human ear; and the intervals in their scale will be more minute, in consequence of the slightest tremor communicated by the action of the radiated muscle to one end of the slender bone being immediately conducted to the internal organ; while in the human ear it has to pass from one bone to another, before it arrives at the vestibulum.

"The cochlea has been considered by all physiologists as

one of the most intricate and curious parts of the ear, and on that account had a most important office assigned to it. This, however, is now to be transferred to the membrana tympani; and, upon attentive consideration of the subject, it will appear impossible for the cochlea to be of any use in modulating sounds, since the ear is only intended to convey impressions received from external bodies; hence, no impression can be communicated to the cochlea, which has not been transmitted by the membrana tympani. But, if all the varieties of sound are repeated by the membrana tympani, no modulation in the cochlea is required; and, when it is considered that the cochlea contains water, instead of air, the effect upon every part will be found to be simultaneous.

"That the cochlea is neither absolutely necessary to fit the organ to be impressed by sounds communicated through air, nor to render it what is termed a musical ear, is sufficiently proved by that part being wanting in birds, whose organ is particularly adapted to inarticulate sounds. Some birds, particularly bullfinches, can be taught to sing various airs, although it will be always in high notes.

"If it should be found that birds hear less accurately than quadrupeds, it will favour the idea that the great delicacy of structure of the cochlea, is intended to render the nerves which are spread upon it more readily impressed by weak tremors, than those in either the vestibulum or semicircular canals.

"The cochlea and semicircular canals must be considered as two of the most important parts of the ear; their peculiar forms are no doubt adapted to some essential purposes; but, what are the precise advantages derived from their particular shape, is at present unknown. There is, however, much ground to believe, that a more extensive knowledge in comparative anatomy, joined with future observations, may clear up this very curious and obscure part of the physiology of the organ of hearing.

"In the elephant, the small bones, the cochlea, and semi-

circular

circular canals, are larger than those in the human ear, nearly in the same proportion with the increased size of the membrana tympani. In that animal there is a very remarkable peculiarity; which is, a cellular structure occupying the upper and posterior part of the skull, enclosed between the two tables, communicating by a considerable aperture with the cavity of the tympanum, and lined by a similar membrane; the cells communicate freely with one another at their lower extremities, but not near the upper, forming irregular cylinders, placed in a converging direction, towards the cavity of the tympanum.

"There is no middle bony septum, separating the cells of the skull belonging to one ear from those which open into the other, but a ready communication between them.

"On the anterior part of the skull there is also a similar cellular structure, only much smaller, which communicates with the nose, but is entirely separate and distinct from that which forms an appendage to the organ of hearing.

"That the elephant hears better than other animals, is generally asserted by those who have had opportunities of making observations on the subject. As this opinion has been advanced by men who had no knowledge in anatomy, and had no previous theory to bias their judgment, it is deserving of credit. The organ of hearing being now found more perfect, and formed upon a larger scale than in any other animal with which we are acquainted, considerable weight is given to this opinion.

"Mr. Corse, who resided many years at Tiperah, in Bengal, and paid particular attention to the manners and habits of elephants, concurs in the belief of their hearing being more acute than that of man. The following circumstances are mentioned by him in proof of it.

"A tame elephant, who was never reconciled to have a horse moving behind him, although he expressed no uneasiness if the horse was within his view, either before or on one side,

side, could distinguish the sound of a horse's foot at a distance, some time before any person in company heard it; this was known by his pricking up his ears, quickening his pace, and turning his head from side to side.

"A tame female elephant, who had a young one, was occasionally sent out with other elephants for food, without the young one being allowed to follow. She was not in the habit of pining after her young one, unless she heard its voice; but frequently, on the road home, when no one could distinguish any sound whatever, she pricked up her ears, and made a noise expressive of having heard the call of her young. This having occurred frequently, attracted Mr. Corse's notice, and made him, at the time the female elephant used these expressions, stop the party, and desire the gentlemen to listen; but they were unable to hear any thing till they had approached nearer to the place where the young one was kept.

"The foregoing observations, the object of which has been to prove that the membrana tympani of the ear has a muscular structure, have already exceeded the limits of a lecture, which prevents us from going further at present into the consideration of this very curious and important organ. The general analogy between the uses of its different parts and those of the organ of vision, and the similar variations of their actions when under the influence of disease, furnish materials which, on some future occasion, may be laid before this learned Society."

*(To be concluded next month.)*

---

ART. II. *Introduction à l'Etude de la Botanique, Ouvrage ornée de dix Planches coloriées, contenant un Discours sur l'Accord des Sciences naturelles; un Traité complet et comparé des Organes des Plantes, et des Fonctions de ces Organes, à toutes les Epoques de leur Vie; dans lesquelles les Termes d'Usage en Botanique sont appliqués et expliqués; une Exposition particulière*

*des*

*des Organes des Plantes connus sous le Nom de Cryptogames; les Principes de l'Art de decrire d'apres Linné; les Détails sur l'Habitation des Plantes, leurs Vertus, leurs Usages, leur Culture, et la Maniere de les arranger, et de les conserver en Herbier; l'Exposition des Méthodes générales de Tournefort, Linné, Jussieu, et des Méthodes particulières des Fougères de Smith, des Mousses d'Hedwig et de Bridel, des Champignons de Bulliard, &c. avec des Tables qui donnent à cet Ouvrage la Commodité d'un Dictionnaire.* Par J. C. PHILIBERT. 3 vols. 8vo. Paris. Chez DEBURE. 1800.

THE title of this work announces its contents, but the work appears to us to merit a title of more consequence than that of an Introduction to the Study of Botany. It may be esteemed a complete course of that elegant science; since it presents, at considerable extent, and with the most satisfactory explanations, not only what relates to the knowledge of the organic parts of plants and their functions; but also the places where they grow, their virtues, and uses; the systems of the best masters to form a methodical arrangement; tables, both in French and Latin, of the terms and of the plants, the explanation of which is given in these volumes. At the end of the last we find ten plates, well engraved and carefully coloured, applicable to every class which compose the systems of Tournefort, Linnæus, and Jussieu. This study, learned from nature and under the conduct of a master, is certainly preferable to the best plates; but books and plates are principally designed for amateurs, who have not the advantage of gardens or masters. *L'Esp. des Journ.*

---

ART. III. *The Edinburgh Practise of Physic and Surgery; preceded by an Abstract of the Theory of Medicine, and the Nosology of Dr. Cullen: and including upwards of five hundred authentic Formulæ, from the Books of St. Bartholomew's, St. George's,*

*George's, St. Thomas's, Guy's, and other Hospitals in London; and from the Lectures and Writings of the most eminent public Teachers. With four quarto Plates, neatly engraved, representing the different Instruments used in Surgery.* Octavo. 897 pages. KEARSLEY, London. 1800. Price 14*s.*

THE editor has combined, in this large volume, the whole of the theory and practice of physic and surgery; the former, extracted principally from Sauvages and Cullen, which he has in many parts elucidated, explained, and sometimes corrected; the latter from the most esteemed practical works of all ages and countries. The work appears to be executed with faithfulness, and may prove useful to practitioners, who, living at a distance from large towns or places where public libraries are formed, are in a degree precluded from having recourse to many volumes, which might aid them in their practice; and to the surgeons of the navy and army, who are obviously prevented having many books.

The volume begins with a definition and brief history of medicine. "Medicine," the editor says, "which is the art of preventing, curing, or alleviating, those diseases to which the human species are subject, consists, according to Boerhaave, in the knowledge of those things by whose application life is either preserved sound and healthy, or when disordered is again restored to its pristine condition." By *life* the editor here evidently means the body, or the constitution. Then follows the theory of medicine and the nosology, taken, as we have before intimated, principally from Cullen; and lastly, the practice of physic and surgery. The introduction to this part will give our readers an idea of the plan on which the work is conducted.

"It has already been observed," (viz. in the Preface) the editor says, "that Sauvages was the first who attempted to arrange diseases according to the plan suggested by Sydenham; and his work still continues the only one that merits

the title of Methodical Nosology. For though Linnæus, Vogel, Cullen, and Sagar, have successively endeavoured to improve his method of classification, they have contented themselves with an enumeration and arrangement of the different genera, without entering into their history and cure: so that, though we have since had various schemes of arrangement, we have had, properly speaking, no complete system of nosology; that is, no complete *course of medicine* according to any of these arrangements. Presuming, therefore, that a practice founded upon the most approved classification, in imitation of the work of Sauvages, might be esteemed an acquisition by medical men, we have endeavoured to execute that task in the present part of this treatise: wherein the practice is modelled on the arrangement of Dr. Cullen; and the outline filled up from the best authors, so as to exhibit the most approved methods of treatment, with the latest discoveries and improvements in the healing art."

The following account of the cynanche maligna will be a not unfavourable specimen of the manner in which the editor has executed this part of the work.

" Sp. II. CYNANCHE MALIGNA.—*The malignant, putrid, or ulcerous sore Throat.*

" Cynanche maligna, Sauv. sp. 3.

" Cynanche ulcerosa, Sauv. var. a. Journ. de Med. 1758.

" Cynanche gangrænosa, Sauv. var. b. Journ. de Med. 1756.

" Ulcera faucium et gutturis anginosa et lethalia, Hispanis, Garotillo, Lud. Mercat. consult. 24.

" Angina ulcerosa, Fothergill's Account of the ulcerous sore Throat, edit. 1751. Huxham on the malignant ulcerous sore Throat, from 1751 to 1753.

" Febris epidemica cum angina ulcusculosa, Douglas's Practical History, Boston, 1736.

" Angina epidemica, Russel Œcon. Natur. p. 105.

" Angina gangrænosa, Withering's Dissert. Inaug. Edinb. 1766.

" Angina suffocativa, Bard's Inquiry, New York, 1771.

" Angina maligna, Johnstone on malignant Angina, Worcester, 1779.

" 1. *History and description.*—This disease is not particularly described by the ancient physicians; though perhaps the Syrian and Egyptian ulcers mentioned by Aretæus Cappadox, and the pestilent ulcerated tonsils we read of in Aetius Amideus, were of this nature. Some of the scarlet fevers mentioned by Morton seem also to have approached near to it. In the beginning of the last century, a disease exactly similar to this is described by the physicians of that time, as raging with great violence and mortality in Spain, and some part of Italy; but no account of it was published in this country till the year 1748, when a very accurate one was drawn up by Dr. Fothergill, and in 1752 by Dr. Huxham. The latter observes, that this disease was preceded by long, cold, and wet seasons; by which probably the bodies of people were debilitated, and more apt to receive contagion, which possibly also might be produced by the stagnant and putrid waters.

" The attack of this disease was very different in different persons. Sometimes a rigor, with fulness and soreness of the throat, and painful stiffness of the neck, were the first symptoms complained of. Sometimes alternate chills and heats, with some degree of giddiness, drowsiness, or headach, ushered in the disease. It seized others with much more feverish symptoms: great pain of the head, back, and limbs; a vast oppression of the præcordia, and continual sighing. Some grown persons went about for some days in a drooping state, with much uneasiness and anxiety, till at last they were obliged to take to their beds. Thus various was the disease, says Dr. Huxham, at the onset. But it commonly began with chills and heats, load and pain of the head, soreness of throat, and hoarseness; some cough, sickness at stomach, frequent vomiting and purging, in children especially, which were

sometimes

sometimes very severe; though a contrary state was more common to the adult. There was in all a very great dejection of spirits, very sudden weakness, great heaviness on the breast, and faintness, from the very beginning. The pulse in general was quick, small, and fluttering, though sometimes heavy and undulating. The urine was commonly pale, thin, and crude; however, in many grown persons, it was in small quantities and high coloured, or like turbid whey. The eyes were heavy, reddish, and as it were weeping; the countenance very often full, flushed, and bloated, though sometimes pale, and sunk.

"How slight soever the disorder might appear in the day-time, at night the symptoms became greatly aggravated, and the feverish habit very much increased, nay, sometimes a delirium occurred on the very first night; and this exacerbation constantly returned through the whole course of the disease. Indeed, when it was considerably on the decline, our author says, he has been often pretty much surprised to find his patient had passed the whole night in a frenzy, whom he had left tolerably cool and sedate in the day.

"Some few hours after the seizure, and sometimes cotemporary with it, a swelling and soreness of the throat was perceived, and the tonsils became very tumid and inflamed, and many times the parotid and maxillary glands swelled very much, and very suddenly, even at the very beginning; sometimes so much as even to threaten strangulation. The fauces also very soon appeared of a high florid red, or rather of a bright crimson colour, very shining and glossy; and most commonly on the uvula, tonsils, velum palatinum, and back part of the pharynx, several whitish or ash-coloured spots appeared scattered up and down, which oftentimes increased very fast, and soon covered one or both the tonsils, uvula, &c. those in the event proved sloughs of superficial ulcers, (which sometimes, however, ate very deep into the parts.) The tongue, at this time, though only white and moist at the top, was very foul

at the root, and covered with a thick yellowish or brown coat. The breath also now began to be very nauseous; which offensive smell increased hourly, and in some became at length intolerable, and that too sometimes even to the patients themselves.

"The second or third day every symptom became much more aggravated, and the fever much more considerable; and those who had struggled with it tolerably well for thirty or forty hours, were forced to submit. The restlessness and anxiety greatly increased, as well as the difficulty in swallowing. The head was very giddy, pained, and loaded; there was generally more or less of a delirium; sometimes a pervigilium and perpetual frenzy, though others lay very stupid, but often starting and muttering to themselves. The skin was very hot, dry, and rough; there was very rarely any disposition to sweat. The urine was pale, thin, crude; often yellowish and turbid. Sometimes a vomiting was urgent, and sometimes a very great looseness, in children particularly. The sloughs were now much enlarged, and of a darker colour, and the surrounding parts tended much more to a livid hue. The breathing became much more difficult; with a kind of a rattling stertor, as if the patient was actually strangling, the voice being exceeding hoarse and hollow, exactly resembling that from venereal ulcers in the fauces: this sound in speaking and breathing was so peculiar, that any person in the least conversant with the disease might easily know it by this odd noise; from whence indeed the Spanish physicians gave it the name of *garotillo*, expressing the noise made by persons when they are strangling with a rope. Our author never observed in one of them the shrill barking noise that we frequently hear in inflammatory quinsies. The breath of all the diseased was very nauseous; of some insufferably fetid, especially in the advance of the disorder to a crisis; and many about the fourth or fifth day spit off a vast quantity of stinking purulent mucus tinged sometimes with blood; and sometimes

times the matter was quite livid, and of an abominable smell. The nostrils likewise in many were greatly inflamed and excoriated, continually dripping down a most sharp ichor or sanious matter, so excessively acrid, that it not only corroded the lips, cheeks, and hands of the children that laboured under the disease, but even the fingers and arms of the very nurses that attended them: as this ulceration of the nostrils came on, it commonly caused an almost incessant sneezing in the children; but few adults were affected with it, at least to any considerable degree. It was surprising what quantities of matter some children discharged this way, which they would often rub on their face, hands, and arms, and blister them all over. A sudden stoppage of this rheum from the mouth and nostrils actually choked several children; and some swallowed such quantities of it, as occasioned excoriations of the intestines, violent gripings, dysentery, &c. nay, even excoriations of the anus and buttocks. Not only the nostrils, fauces, &c. were greatly affected by this extremely sharp matter, but the wind-pipe itself was sometimes much corroded by it, and pieces of its internal membrane were spit up, with much blood and corruption; and the patients lingered on for a considerable time, and at length died tabid; though there were more frequent instances of its falling suddenly and violently on the lungs, and killing in a peripneumonic manner.

"Dr. Huxham was astonished sometimes to see several swallow with tolerable ease, though the tumour of the tonsils and throat, the quantity of thick mucus, and the rattling noise in breathing, were very terrible; which he thinks pretty clearly shews, that this malignant quinsy was more from the acrimony and abundance of the humours than the violence of the inflammation.

"Most commonly the angina came on before the exanthemata; but many times the cuticular eruption appeared before the sore throat, and was sometimes very considerable, though there was little or no pain in the fauces; on the contrary, a very

very severe angina seized some patients that had no manner of eruption; and yet, even in these cases, a very great itching and desquamation of the skin sometimes ensued; but this was chiefly in grown persons, very rarely in children. In general, however, a very considerable efflorescence broke out on the surface of the body, particularly in children; and it most commonly happened the second, third, or fourth day: sometimes it was partial, sometimes it covered almost the whole body, though very seldom the face: sometimes it was of an erysipelatous kind, sometimes more pustular: the pustules frequently eminent, and of a deep, fiery, red colour, particularly on the breast and arms; but oftentimes they were very small, and might be better felt than seen, and gave a very odd kind of roughness to the skin. The colour of the efflorescence was commonly of a crimson hue, or as if the skin had been smeared over with juice of raspberries, and this even to the fingers' ends; and the skin appeared inflamed and swoln as it were; the arms, hands, and fingers were often evidently so, and very stiff, and somewhat painful. This crimson colour of the skin seemed indeed peculiar to this disease. Though the eruption seldom failed of giving some manifest relief to the patient, as to anxiety, sickness at stomach, vomiting, purging, &c. yet there was observed an universal fiery eruption on some persons, without the least abatement of the symptoms; nay, almost every symptom seemed more aggravated, particularly the fever, load at breast, anxiety, and delirium; and our author knew more than one or two patients die in the most raging frenzy, covered with the most universal fiery rash he ever saw; so that, as in the highly confluent small-pox, it seemed only to denote the quantity of the disease, as he terms it.

"He had under his care a young gentleman, about 12 years of age, whose tongue, fauces, and tonsils, were as black as ink, and he swallowed with extreme difficulty; he continually spit off immense quantities of a black, sanious, and very fetid matter,

matter, for at least eight or ten days :—about the seventh day, his fever being somewhat abated, he fell into a bloody dysentery, though the bloody, sanious, fetid expectoration still continued, with a most violent cough. He at length indeed got over it, to the very great surprise of every one that saw him. Now, in this patient, a severe and universal rash broke out upon the second and third day; and the itching of his skin was so intolerable, that he tore it all over his body in a most shocking manner: yet this very great and timely eruption very little relieved his fever and frenzy, or prevented the other dreadful symptoms mentioned.

" An early and kindly eruption, however, was most commonly a very good omen; and, when succeeded by a very copious desquammation of the cuticle, one of the most favourable symptoms that occurred; but when the eruption turned of a dusky or livid colour, or prematurely or suddenly receded, every symptom grew worse, and the utmost danger impended, especially if purple or black spots appeared up and down, as sometimes happened; the urine grew limpid, and convulsions came on, or a fatal suffocation soon closed the tragedy.

" The disease was generally at the height about the fifth or sixth day in young persons, in the elder not so soon; and the crisis many times was not till the eleventh or twelfth, and then very imperfect; some adults, however, were carried off in two or three days; the distemper either falling on the lungs, and killing in a peripneumonic manner; or on the brain, and the patient either died raving or comatose. In some, the disease brought on a very troublesome cough, purulent expectoration, hæmoptoë, and hectic; in which they lingered on for several weeks, and then died tabid.

" If a gentle easy sweat came on the third or fourth day; if the pulse became more slow, firm, and equal; if the sloughs of the fauces cast off in a kindly manner, and appeared at the bottom tolerably clean and florid; if the breathing was more soft and free, and some degree of vigour and quickness returned in

the

the eyes; all was well, and a salutary crisis followed soon by a continuance of the sweat, and a turbid, subsiding, farinaceous urine, a plentiful expectoration, and a very large desquammation of the cuticle. But if a rigor came on, and the exanthemata suddenly disappeared or turned livid; if the pulse grew very small and quick, and the skin remained hot and parched as it were, the breathing more difficult, the eyes dead and glassy, the urine pale and limpid, a frenzy or coma succeeded, with a coldish clammy sweat on the face or extremities; life was despaired of; especially if a singultus and choking or gulping in the throat attended, with sudden, liquid, involuntary, livid stools, intolerably fetid. In some few patients, Dr. Huxham observed, some time before the fatal period, not only the face bloated, sallow, shining, and greasy as it were, but the whole neck very much swoln, and of a cadaverous look; and even the whole body became in some degree œdematous; and the impression of a finger would remain fixed in a part, the skin not rising again as usual; an indication that the blood stagnated in the capillaries, and that the elasticity of the fibres was quite lost.

"2. *Prognosis.*—This may be easily gathered from the above description. The malignant and putrid tendency of the disease is evident, and an increase of the symptoms which arise from that putrescent disposition of the body must give an unfavourable prognostic; as, on the contrary, a decrease of these, and an apparent increase of the *vis vitæ*, are favourable; in general, what is observed to be favourable in the nervous and putrid malignant fevers, is also favourable in this, and *vice versa*.

"3. *Causes.*—Since the accurate accounts given by Drs. Fothergill and Huxham of the epidemics which prevailed about fifty years ago, this disease has frequently been observed at times epidemic in almost every different part of Britain. Like small-pox, measles, and chin-cough, it seems in every case to be the effect of a peculiar and specific contagion. It has been

observed to prevail equally generally in every situation, and at every season; and on exposure to the contagion, no age, sex, or condition is exempted from it. But the having once had the disease, seems in this affection to afford the same security against future contagion as in the small-pox: at least instances where it can be said that the same individual has been twice affected with it, are both very rare and very doubtful, as well as in the small-pox.

"4. *Cure.*—Like other febrile contagions, the malignant ulcerous sore throat is terminated only by a natural course; and the chief business of the practitioner is to combat unfavourable occurrences. In this the septic tendency of the disease is chiefly to be kept in view. The debility with which it is attended renders all evacuations by bleeding and purging improper, except in a few instances on the first attack, where the debility is less, and the inflammatory symptoms more considerable. The fauces are to be preserved from the effects of the acrid matter poured out upon them, and are therefore to be frequently washed out by gargles of sage tea and vinegar, or by the following, used at St. George's Hospital:

"℞ Mellis acetati ʒij, Aquæ hordei ʒx. Misce, fiat gargarisma.

"Or the following from the Pharmacopœia of St. Thomas's:

"℞ Tincturæ rosæ ʒviij, Mellis rosæ ʒj. Misce.

"℞ Gargarismatis communis ʒviij, Aluminis ʒß. Misce.

"℞ Mucilaginis seminis cydon. ʒvij, Mellis rosæ ʒj, Boracis pulverati ʒij. Misce.

"Dr. Saunders recommends the following detergent remedies to procure a separation of the sloughs from the fauces:

"℞ Decoct. cinchonæ ʒvj, Acidi vitriol. dilut. ʒj. Mellis rosæ ʒj. Misce, fiat gargarisma quocum os et fauces sæpè de die colluantur.

"℞ Oxymel. æruginis ʒß, Mellis rosæ ʒij, Decocti hordei ʒiijß. Misce, et utatur pro gargarismate.

"This disease, Dr. Saunders observes, should be distinguished

guished from the inflammatory angina, and from a particular species of epidemic sore throat, which has lately appeared in this country, attended with much pain and difficult deglutition, violent headach with inflamed eyes, sometimes an universal redness and eruption on the skin.

" A diaphoresis, the Doctor observes, may be brought on by the following:

" ℞ Aquæ ammon. acet. ℥ij, Vini antim. tart. ʒj, Mist. camphorat. ℥jv. Misce. Sumat cochlearia iij sexta quaque hora.

" Sometimes a diarrhœa occurs in this disease. It may be moderated by,

" ℞ Kino in pulv. trit. ℈j, Pulv. cretæ comp. cum opio gr x. Misce, fiat pulvis, vel syrupum zingiberis addendo, bolus, ad alvum contrahendum mane sumendus.

" The putrescent state of the whole system should be guarded against and corrected by internal antiseptics, especially by the Peruvian bark given in the beginning, and continued through the course of the disease. For this purpose may be administered the haustus cinchonæ of St. George's Hospital:

" ℞ Decocti cinchonæ ℥jß, Tincturæ cinchonæ ʒjß. Misce.

" Great benefit has also been derived from the liberal use of the mineral acids, which may be joined with the draught. Both the vitriolic and muriatic, in a state of proper dilution, have been highly extolled by different medical writers, and are productive of the best effects in actual practice, when they can be introduced to a sufficient extent. On the first attack, emetics, both by vomiting and nauseating, may prove useful. When any considerable tumour occurs, blisters applied externally to the throat will be of service, and in any case may be proper to moderate the inflammation.

" Very lately, the internal use of the capsicum annuum, or Cayenne pepper, as it is commonly called, has been highly celebrated in this affection; and it is particularly said to have

have been employed with singular success in the West Indies."

The editor has omitted to observe, that this disease is more incident to young persons, and more frequently fatal to them, than to those more advanced in years, and to females than to those of the opposite sex; also, that among the sequelæ to the complaint, deafness is no uncommon occurrence.

The second part of this work contains the outlines of the practice of surgery. Four plates, containing delineations of the principal instruments used in surgical operations, are added; but the style of these engravings is not very elegant, nor are all the instruments correctly represented. Upon the whole, however, they seem calculated to answer the intention of the compiler.

---

ART. IV. *Histoire naturelle des Salamandres de France; précédée d'un Tableau méthodique des autres Reptiles indigènes: avec six Planches coloriées.* Par P. A. LATREILLE, Membre associé de l'Institut National, des Societés Philomatique et d'Histoire Naturelle de Paris, de celles des Sciences, Belles Lettres et Arts de Bourdeaux. Octavo. Paris. 1800.

IN the fifth year, 1797, Latreille sent to the mathematical and physical class of the Institute, a Memoir on the Salamanders of France. The work was favourably received, and the Institute ordered that this memoir should be printed among those of other learned foreigners. Since that time the author has employed himself in new inquiries, the result of which he has inserted in the work now before us. It is divided into two parts. In the first, M. Latreille gives a methodical exposition of the other reptiles of France, according to the arrangement of C. Brogniart. In the second part, the author gives the natural history of the salamanders of France. He mentions successively the modern naturalists who have treated

on this subject; of the uncertainty in the nomenclature of salamanders, their place in the order of nature, their organization, and their habits compared with those of other reptiles; their habitation, retreat, and reappearance; of the state of our knowledge on the generation of terrestrial salamanders; their amours, and the coupling of the aquatic species; of the disposition of their eggs and the laying them, of those of the tetard or vermin, of the new-born salamanders; of the casting of the skin, and of the faculty of reproducing such members as they lose. M. Latreille concludes this part by some remarks on the different sexes of the salamanders, of the organs of voice, and on their peculiar properties.

He afterwards gives a systematic table of the salamanders of France, both in French and Latin; and finishes by a description of the different species. These are, 1. the *terrestrial salamander*, which is figured, pl. i. and the second plate gives its skeleton; 2. the *marbled salamander;* 3. the *tufted salamander*, these two are figured in the third plate; the fourth plate exhibits a tufted female salamander, the belly opened, and the intestines shewn; 4. the *abdominal salamander*, figured plate v.; 5. the *striped salamander*, in the same plate; 6. the *spotted salamander*, shewn both male and female in plate vi.; 7. the *web-footed salamander*, plate vii. [*Mag. Enc.*

---

ART. V. *A cursory View of the Treatment of Ulcers, more especially those of the scrophulous, phagedænic, and cancerous Description. With an Appendix, on Baynton's new Mode of treating old Ulcers of the Leg.* By RICHARD NAYLER, Surgeon to the Gloucester Infirmary. Octavo. 180 pages. KEARSLEY, London. 1800. Price 3*s.* 6*d.*

THE author has divided his subject into two parts: 1st, he treats on those ulcers which may exist independently of any affection of the system: 2d, of ulcers, in the production or existence

existence of which the constitution participates. In treating of local ulcers, especially those of the inferior extremity, he offers some remarks on the necessity of rest, and an horizontal position of the leg; on the proper use of internal remedies; the application of bandages; and the choice of topical remedies. The author's opinion, upon each of these heads, does not differ materially from that of other practitioners who have written on the same topics; except, perhaps, where he treats of the particular periods in which the dressing of ulcers ought to be renewed. From this part of the work we shall present our readers with an extract or two.

The author observes, that "the customs of surgery have, in some degree, decided this point in favour of the repetition of fresh dressings once a day, and in some cases twice; but scarcely ever has it been the practice to renew them oftener. The greater or less frequency of the surgeon's visits has, indeed, had some influence in this respect; and the patient not uncommonly consents to suffer some hours of inconvenience rather than take off his dressings at any other moment. That this rule has both its advantages and its disadvantages is extremely obvious; but let us inquire how far a general rule may be put in practice, with regard to the renewal of our applications to an ulcer.

"There is scarcely any instance in which an ulcer, however healthily disposed, will not after long remaining undressed become more or less uneasy. The matter discharged, though of a quality the most favourable that can be wished, will acquire irritating qualities barely from the circumstance of its being pent up. The natural heat of the part disposes it to putrefaction, or some spontaneous chemical change, by which it becomes capable of acting on the ulcer that produced it, greatly, perhaps, to its injury. In such a case, it is likely that every ill consequence would be obviated by renewing our applications at the customary periods; but, where an ulcer is so large as to yield a good deal of pus, or where, whether large

large or small, its discharges are thin, offensive, and irritating, the inconvenience of retaining the dressings for too many hours together cannot fail of being considerable.

" Perhaps there is no surer guide to direct us in these respects than that obvious one—of the patient's own feelings; at least it is certain, that the operations of nature are not to be calculated by the movements of the clock. An ulcer healthily disposed not only forbids our interference, but universally resents it when prematurely exercised. The patient's feelings cannot in that case be called in question, as a just indication of the time when our applications should be renewed. An uneasy disposition in the part tells us what we should do, and till this happens, it is plain we ought to do nothing.

" This question, however, applies to every description of ulcer; but there may be some where the pain is of necessity brought on by the remedies applied, or is an existing, and perhaps unremitting symptom, connected with the ulcer itself. Under such circumstances, we are warranted in forming a judgment for ourselves as to the proper periods when fresh dressings should be applied. If the patient has an interval of ease it should by no means be interrupted, for there is no assistance which we can afford that will compensate for our officiousness at an improper moment.

" For the most part, where there is much pain and irritation, there is a proportionate quantity of discharge; and where that is the case, the nature of our dressings should either be such as to absorb the fluids as fast as they are formed, or the renewal of fresh dressings must be more frequent.

" It is necessary, in fact, that the dressing for an ulcer, particularly a large one, should be pervious to the matter discharged from it. For this reason, there is no outer dressing that can be used more proper than tow; although, in the practice of some surgeons, it may appear, and certainly is, more coarse and inelegant than lint. It has, nevertheless, the advantage of letting out the discharge more readily than the

latter, and of suffering it to pass into the cloths which surround the limb, which may be easily removed when fresh dressing is not advisable.

"Every surgeon must have had occasion to remark the importance of giving the discharge from an ulcer a free passage. Nothing, indeed, is more common than to see an ulcer converted into a sort of issue, by the practice of confining the discharge; which is commonly done, first by applying an outward dressing, which is impervious; and secondly, by binding this so firmly on, that the matter can have no outlet, but must act upon the sore in the same way as a pea does in an issue; with this difference, indeed, that on every renewal of the dressing, the sore must become larger and larger, whilst, in the other case, it is confined to certain dimensions. Outer dressings of linen rag, spread with any tenacious salve or ointment, are particularly exceptionable in this view; the matter, indeed, which cannot find its way through the pores of the linen, attempts to force itself between the plaster and the skin; but when a bandage is employed at the same time, its escape, even by this means, is prevented, and those consequences take place of which I have just now made mention."

The different kinds of virus which occasionally prevail in the system, and produce ulcers of a peculiar character, are here enumerated to be the scorbutic, the venereal, the scrophulous, the phagedænic, and the cancerous. The signs by which the author has distinguished the scorbutic ulcer, are "a particular languid state of the circulation of the blood on the surface of the body, an offensive breath, soft, spongy, and bleeding gums, high-coloured and irritating urine, &c.

"The ulcer itself is very apt to bleed on being slightly touched; its colour is brownish; its surface of a loose unconnected texture, frequently shooting out fungous granulations, which also bleed on the gentlest force that can be applied to them. The skin round the ulcer is of a livid, purple, or black hue; and if there be any spots, as there frequently are, these

are

are all of the same complexion. The discharge is usually thin and sanious, and runs from the part in considerable quantity almost immediately after the ulcer is drest."

In the management of this species of ulcer, a milk and vegetable diet is advised, with the use of fermenting liquors. We are dissuaded from every kind of unctuous or greasy application; and recommended to apply a poultice of rye-meal, mixed with an infusion of malt, and a table-spoonful of yeast. A mixture of powdered bark and myrrh may also be sprinkled on the sore; and poultices of carrots or turnips, with the occasional application of mel Ægyptiacum and mel rosæ. Consistently with the author's theory, that scurvy is merely a disease of the fluids, he thinks it unnecessary to give any internal remedies against this species of ulcer.

The venereal sore, on which the author next treats, is said to be "the most irregular of all ulcers; it seldom spreads out into one large sore, but usually appears in a number of small distinct ulcerations, as shankers do upon the penis. A bar or division of whole skin frequently runs across, and divides what would otherwise be a continued ulcer into two or more. This is perhaps the most distinguishing mark by which we may know a venereal from any other kind of ulcer, though it has scarcely been noticed by writers on this subject. Another mark, which occurs not only in the true venereal ulcer, but often assists us to decide in those of the doubtful kind, is the appearance of spots of a copper colour around the sore. These spots indeed do not always appear, but when they do, they corroborate very strongly any conjectures that may have been raised respecting the syphilitic nature of the ulcer.

"Where there can be no doubt of the specific nature of the ulcer, the use of quicksilver in any mode that can be brought to affect the salivary glands, will of itself go a great way towards effecting a cure. Not that local applications of a mercurial and corrosive kind should be neglected, for they are very material. Sprinkling the sore from time to time with red

red nitrated quicksilver, or dressing it with any stimulating ointment in which a portion of that remedy is incorporated: applying verdigris in the same manner; or, what is perhaps more effectual than any other method, dressing the sore with lint dipped into a solution of muriated quicksilver; are steps very proper to be pursued. In a great many cases the ointment of nitrated quicksilver, either alone or weakened with hog's lard, will be found to answer; and it is sometimes of use to brush particular parts of the sore that appear foul and sloughy with a solution of nitrated silver in distilled water."

When a scrophulous ulcer breaks out, the author says, "we are led to distinguish it from others of a different nature, by considering the general habit of the patient, which will usually shew some signs of scrophula." Although the cure of this ulcer is to be attempted by combating the disease of the habit, the author seems to place but little confidence in the remedies usually employed. If the scrophula has become manifest in the form of an enlarged gland, threatening to suppurate and become an ulcer, he thinks "we should, in the first instance, draw blood from the part, by the application of a sufficient number of leeches; repeating this several times successively, at intervals of three or four days, or a week, according to the effect produced. We should also, without delay, prescribe an emetic, and repeat it twice or thrice; or we should administer some purgative and emetic remedy united, so as to produce a moderate evacuation in both directions. This latter effect may be very conveniently obtained by a dose of calomel joined with a very small proportion of tartarized antimony; a formula extremely well calculated for children.

"In the intervals between the application of the leeches, as it will be thought right to be doing something, and to take even a chance of promoting the great object of dispersion, we should apply the water of acetated ammonia to the part, or a solution of muriated ammonia in brandy, or even a solution of common

common salt in water, in the proportion of one part to twenty-eight. If it can be had, we may use, in preference to the foregoing, a poultice of the well-known marine plant, called sea tang, (the fucus vesiculosus of Linnæus,) bruised in a mortar, and applied cold, a remedy approved of by the late Mr. Hunter. If, in spite of these endeavours, the swelling gives pain, the inflammation seems to gain ground, and the skin becomes red, we may try the effect of pounded ice applied to the part, and renewed as fast as it melts away.

"In some cases, where the swelling is particularly indolent, increasing only in size, and without shewing any other disposition, I have witnessed the best effects from the use of a liniment composed only of vitriolic acid and olive-oil, in the proportion of one drachm to an ounce of the latter. Some have also been benefited by the use of the linimentum bituminis ammoniatum, a remedy employed as 'a most powerful 'dissolver of thickened lymph,' by Dr. Kirkland. In some, a plaster has been of service, composed of equal parts of the quicksilver and warm plasters, and lightly sprinkled towards the centre with camphor finely powdered.

"The other remedies necessary to be used, as well to prevent the progress of a tumour to the state of a scrophulous ulcer as to promote the cure of the latter when established, are, sea-bathing, if it can be had, or the artificial sea-water bath, the use of natron internally, either per se, or in the state of burnt sponge; the occasional exhibition of calomel, as a purge; a copious and persevering exhibition of the bark; and, joined with it, if not likely to occasion disgust in the patient, a good proportion of volatile alkali.

"The bark will in general be found most effectual when exhibited after a course of calomel purges has been persevered in, or where emetics have been premised. It is expevient indeed in most cases to employ these means alternately; for the bark will, after a time, lose its effect; and in that case the use of calomel purges should be adopted, and after a while

while the bark will again be found to succeed as well as at first.

" Decoctions of sarsaparilla and mezereon, in conjunction or separately, are not to be rejected, when more promising remedies seem to fail, or where the opportunity of employing them is particularly favourable. Many patients are soon disgusted with the bark, no less on account of its nauseous taste than its appearance, when employed in substance; and when this is the case, it is some relief to them to use decoctions of sarsaparilla, &c. in its stead.

" The scrophulous ulcer, though in most cases it is found to affect glandular parts, and to arise from the suppuration of the glands themselves, is nevertheless frequently seen in other situations. There is, indeed, no part of the body where it may not exist, and its appearance on the extremities is scarcely less common than on the neck, breast, &c. It is particularly liable to occur in those places where the disease has reached the bones; and will often remain, and extend itself, after the caries is got the better of. It also forms a description of ulcer very difficult of cure in the legs, ancles, and feet; because, independent of the obstacles formed by the specific character of the complaint, we have to contend with those impediments which are common to every ulcer in the same disadvantageous situation.

" This kind of ulcer is not attended with any striking marks by which its specific nature may be distinguished. It may, however, be pretty accurately discriminated by the concomitant symptoms and appearances, its situation, &c. The discharge is likewise of a curdled, whitish, unnatural appearance; the edges of the sore are thick and projecting; and the surrounding parts are tumid, and insensible in general, though in some cases very painful.

" It has been already observed, that the treatment of this ulcer depends almost wholly on the treament of the disease in the system. Nevertheless, there is something to be done by

means of local applications; at least, it is indispensably necessary that every precaution required in the treatment of a common ulcer should be regularly and attentively observed in this; such as a daily renewal of the dressings, and every regard to cleanliness, as well as to the circumstances under which motion or rest should be enjoined.

"If bathing in the sea can be had, it is of service to expose the ulcer at the time of going in, and the same if an artificial sea-water bath be used; or if circumstances do not admit of either of these, the ulcer may at least be washed daily with cold salt water, sprinkled over it by means of a sponge; this, indeed, should be a preliminary to every other dressing that may be intended.

"The topical applications supposed to facilitate the healing of the scrophulous ulcers are exceedingly numerous; but we shall here only notice those few that experience has most entitled to a preference. Solutions of natron, or of acetated ceruse, of vitriolated zinc, of muriated quicksilver, of ammoniated copper, or of nitrated silver, are each worthy of a trial; and these should either be brushed over the sore with a camel's hair pencil, or applied on pledgits of lint.

"There is some reason to fear that common salves and greasy applications rather do mischief; they are therefore to be avoided, if possible, even as outer dressings, but much more so as dressings to the ulcer itself. Where their great convenience overbalances these considerations, with regard to the former purpose, much of the objection may be obviated by a choice of such ointments as include in their composition an ample proportion of soap; for by that the clamminess of such salves is prevented, and the dressing, when taken off, leaves the surrounding skin clean and unsmeared.

"There are, however, some formulæ which are exceedingly well adapted to the treatment of the ulcer itself, and which yet admit of oil, &c. among their ingredients, as a means of incorporating other substances. These compositions are too

numerous,

numerous, and on too equal a footing with regard to their virtues, to require any circumstantial account in this place. We would therefore observe in a general way, that the most serviceable applications to scrophulous ulcers, are those ointments which include mineral alkali, neutral salts, (as the vitriolated natron,) volatile alkali, quicksilver in the nitrous or muriatic acids, honey, or the juices of narcotic vegetables. With regard to my own experience on this head, nothing has succeeded better with me than a composition of unguentum picis united with such a proportion of sal cornu cervi as will just stimulate without inflaming the ulcer. It must be observed, however, that when this ointment is employed, it should be mixed at the time of dressing the wound; as otherwise its qualities will be impaired by the escape of the volatile parts of the salt into the atmosphere. Next to this remedy, I know of no better ointment than the ceratum mellis, prepared with the emplastrum lithargyri cum gummi."

The next subject which employs the author's attention is the phagedænic ulcer. He here does little more than recite the opinions of a late ingenious writer (ADAMS on Morbid Poisons,) who has anticipated the ideas he had formed, and expressed himself in a satisfactory manner. In the treatment of this ulcer, we have still to lament that the greatest uncertainty exists, as to the effects of our most celebrated remedies; and that a patient trial of each in succession will often be necessary, before any of them produce the salutary consequences we look for.

The cancerous ulcer has been improperly defined as "a malignant, corroding sore upon the skin, the surface of which is glossy and shining, and furnishes an offensive and ichorous discharge. It partakes of some of the shooting, lancinating, darting pain of the cancer; though not near in so great a degree. But the great distinction between that and the true cancer is, that its edges are not indurated and tucked in, or inverted, as those of the true cancer. The true cancer cannot be cured without

without extirpation; the cancerous ulcer very frequently admits of a cure. The latter now and then makes its appearance after the venereal chancre, for the corrosive, creeping, and malignant ulcer that comes on after that complaint is of this kind."

By the term *cancerous* ulcer, however, we should mean that state of a *real* cancer in which it ceases to be occult. Our author gives the following description of the progressive steps of this inveterate and cruel disease: "When it takes place in glandular parts, and particularly in the breasts of women, a number of hard chords are found to extend themselves in different directions from the principal tumour. To this circumstance, which presents to the imagination the idea of a resemblance to a crab, is owing the name by which the earliest writers have distinguished a complaint, for which indeed nothing more appropriate can be devised so long as we remain as at present so entirely in the dark respecting its true nature.

"As these hard chords, which are nothing more than inflamed and hardened absorbent vessels diverging from the principal tumour, were observed by the ancients to occur in other ulcerations than those to which in our days the term cancerous is confined, it became common with them to consider as cancers various complaints which, in the more improved state of surgery among the moderns, were afterwards placed in a very different class.

"When a hard tumour which has existed a long time in the breast without either diminishing or increasing, and without giving any pain, begins at length to grow uneasy, to extend gradually in its dimensions, and to be affected with occasional pungent and lancinating pains, there is reason to suspect that it is taking on the cancerous action. This is not, however, invariably the case; since many instances have occurred where the tumour has fallen into a state of inflammation, and even been attended with that peculiar kind of pain which most of all

all is to be suspected, and yet the disease has not proved to be of that fatal nature, but the patient has received a certain, though tedious cure. These instances, when they do occur, are eagerly laid hold of by quacks and the venders of nostrums; and are advertised as instances of the efficacy of their plans, which unwary persons really affected with cancer are sometimes drawn in to make trial of, at the expense perhaps of the only resource which remains for their security.

"The lips, the tongue, the face, the penis, and testicles, are the most common situations of cancer in men: in women, it is usually confined to the breasts, the uterus, and the rectum; though in either sex any of the soft parts may be attacked by it.

"The disease does not put on the same appearance in every instance, but, in common with some other local affections, is so far influenced by the peculiarity of structure of the part affected as to exhibit very distinct appearances. These indeed have borne so little resemblance, in some instances, as to have tempted practitioners to deny that the general term cancer could be strictly applied to them. The cancer of the uterus at least has been thought a very fair exception; and not only that of the rectum, but every carcinomatous affection which begins on the skin, or parts superficially situated, seems clearly distinct from the same disease in the breasts or other secreting glands.

"A preceding or preparatory stage of this disease authors have distinguished by the name of scirrhus. The scirrhous state of a gland is that in which the tumour gives no uneasiness, and in which the skin does not lose its natural colour. Every indurated and insensible tumour in a gland is therefore, strictly speaking, a scirrhus: the term, however, is never applied to such affections, unless they threaten to terminate in cancer.

"When a scirrhous tumour has advanced to a cancerous state, the hardened substance takes on some degree of irregularity;

gularity; and not only becomes more or less attached to the part on which it grows, but advances in a certain degree towards the skin, which, even whilst lax, participates in the disease, and forms a kind of tucking in or fissure. At this part the alteration commonly begins which gives the disease the name of an open (in opposition to the term occult) cancer; and from this breaking kind of state, it gradually proceeds to such a process of ulceration, and consequent discharge of matter, as calls for the daily renewal of some kind of external dressing."

The local treatment in cancerous sores must be such as is calculated to alleviate the pain, to amend the discharge, to retard the extension of the ulcer, and restrain occasional hæmorrhages. For the purpose of alleviating the pain, our author recommends the narcotic vegetables usually had recourse to, either in the form of extract or infusion.

To correct the fetid discharge, mashed hemlock, carrots, or turnips may be applied; or, what is much to be preferred, the carbonic acid gas. Almost the only internal remedies he thinks worth trying in order to arrest the progress of the disease, are the *kali arsenicatum* of St. Bartholomew's Hospital, and the different preparations of iron. He mentions, indeed, the juice of the clivers or goose-grass: but, our own experience inclines us to believe that there is no benefit whatever to be derived from that plant. The external means enumerated for checking the extension of the sore, are Mr. Justamond's method of cautiously touching its edges with the muriated tincture of iron, or the arsenical caustic; with the occasional application of blisters, in the vicinity of the ulcerated part.

The last object of Mr. Nayler's inquiry is after the means of restraining hæmorrhages in the cancerous ulcer; for which purpose he mentions vitriolated copper, alum, spirit of turpentine, powdered ice, Ruspini's styptic, and the arsenical caustic. In an appendix to this work, the author notices Mr. Baynton's treatment of ulcers, by slips of adhesive plaster;

which he regards as an important discovery, but does not admit its claim to uniformity of success, even in the fairest cases that can occur for its use.

---

ART. VI. *Traité du Goître et du Crétinisme, précéde d'un Discours sur l'Influence de l'Air humide sur l'Entendement humain.* Par F. E. FODÉRÉ, ancien Médecin des Hôpitaux civils et militaires, et Professeur de Physique et de Chemie à l'Ecole centrale de Nice. 248 pages. Octavo. Paris. An VIII.

INSTEAD of a preface, the author has put at the head of his treatise a definition of the word *Crétinism*. "The goître," he says, "is well known, as it is found in every country; but possibly every reader will not know what is meant by the word Cretinism:—it is derived from *Cretin*, a name given in certain countries to those persons who are quite stupid, and are likewise called idiots, &c. The name Cretin comes from the word Christian, good Christian, Christian by excellence; a name given to these poor idiots, because, it is said, they are incapable of committing any sin. I have adopted this term in preference to any other, because the individuals to whom it is applied, are more than idiots, and that they, consequently, merit a particular description."

In the preliminary discourse the author inquires into the influence a moist atmosphere has on the human understanding. The treatise itself is divided into four parts: the first section treats of the goître, the countries in which it is principally found, the causes which produce it, and the appropriate remedies. The author thinks the most probable remote cause of this disorder is the humidity of the atmosphere, and that the proximate cause is a relaxation of the muciferous canals of the thyroid gland. In the second section M. Fodéré gives first a history of Cretinism, complete and incomplete; then speaks of the propagation of it, which is by generation,

and more by the father than the mother. The object of the third section is to inquire into the general cause of the goître and Cretinism. After having given a topographical and meteorological description of the vallies in which these disorders are chiefly found, after having spoken of the comparative hygrometrical experiments relating to this subject in different parts of the valley of Aoste, the author has determined that atmospherical humidity causes the goître and Cretinism, and refutes some other opinions, such as, that cold, disorders of the skin, idleness, &c. are the causes. In the fourth section the physical and moral means to be employed to prevent the goître and Cretinism are treated of. At the first view it would appear, he says, as if these disorders were inherent in the nature of the soil; but, on observing that the number of Cretins have diminished considerably in some countries *, the consequences either of natural revolutions, or of revolutions by the hands of men, he is tempted to believe, that we may hereafter prevent Cretinism in any country, by following such rules as experience and observation point out, and which our author developes in this section: at the same time he gives a plan of medical arrangement proper to co-operate in the diminution of the number of Cretins. The extreme state of degradation in which human nature appears in these people,

* At the beginning of the year 1792, the valley of Aoste alone had seventeen hundred and forty complete Cretins, in a population of sixty-eight thousand and twenty-two souls, that is, one thirty-eighth part, not including enormous goîtres, and half Cretins. Their number is yet very considerable, yet they are much diminished in the last twenty or thirty years, as has been proved by the public registers, and by the observations of old men. The curate of St. Victor de Challant assured M. Fodéré, that during the last twelve years in which he held the curacy he had interred forty perfect Cretins, some very old and others middle-aged; he supposes they were all in the parish when he came. It has now only four perfect, and thirty-two half Cretins, in a population of nine hundred and eighty persons. On comparing these numbers, there is a diminution of thirty-six in this parish.

makes

makes us anxiously wish that the author's philanthropic ideas on this subject may be realized.

Rivers properly embanked, marshes drained, a more wholesome distribution of villages and houses, a diminution of thick woods and trees, the cultivation of the hills and mountains, the changes which thence take place in the temperature of the atmosphere, the elevation of the soil, and the reduction of the mountains, and, lastly, the progress made in education and civilization; these are the causes to which our author attributes the diminution of Cretins. He afterwards points out the methods to be pursued to diminish the humidity of the atmosphere in the Sub-alpine vallies, and the means of fortifying the body against the impressions of a humid atmosphere, and to render men who are obliged to live there less sensible of its influence. The last chapter treats of the moral education proper for the vallies of the Alps, the means of bettering the condition of complete Cretins, and of the treatment of such as are only partially so.

There are now actually three unfortunate Cretins exhibited at Paris under the name of "Living Moguls." *Mag. Enc.*

---

ART. VII. *A candid Inquiry into the Education, Qualifications, and Offices, of a Surgeon-Apothecary; the several Branches of the Profession being distinctly treated on, and suitable methodical Forms annexed; besides various other Topics connected with the principal Office are also subjoined.* By Mr. JAMES LUCAS, late a Surgeon of the Leeds Infirmary, from its Institution, a Member of the Corporation of Surgeons, and a corresponding Member of the London Medical Society. Duodecimo. 356 pages. CADELL, London. 1800. Price 5s.

THE author has taken an extensive range, and his book embraces a great variety of topics. He adopts his pupil, the

future surgeon-apothecary, at an early period of life, and thence leads him on until he has qualified him to be master of a shop; but he makes of his apothecary an isolated being, and seems to think he was born for that particular profession, and that his education and studies are to be different from those necessary for other walks in life. This is, however, far from being generally the case. One or other of the sons of the apothecary is usually educated, it is true, with a view to succeed his father; but the future destination of children is oftener the effect of accident, than of any plan conceived early and regularly pursued from childhood; and it is not necessary it should be otherwise: a boy who has received a good education, that is, who writes legibly, is acquainted with arithmetic, and has acquired a moderate portion of classical learning, is qualified to enter on the studies necessary for any profession.

"A parent," the author says, "who would wish a young man to follow the profession of a surgeon-apothecary with credit, or commendable emulation, should take a very early survey of the requisite school-learning, as well as competency of a professional preceptor, and should not fail to count the costs of subsequent studies. To a failure in such necessary and seasonable inquiries may be imputed the ignorance of many adventurous practisers.

"When parents have placed their children under proper teachers, they are too apt to neglect exacting obedience, or assisting in the correction of bad habits; whereas they might often animate proficiency, and preclude irreparable misconduct."

These rules, or cautions, as far as they are practicable, are as necessary in educating a boy for any other business as for an apothecary; the means should be adapted to the end.

The volume is divided into one hundred and twenty-four sections; but a section is sometimes only a short paragraph,

separated from the subsequent one by the words "Section the Fourth, Fifth, or Sixth," printed in large letters, without any obvious reason for such division. On the whole, the author will generally be found to be too diffuse and verbose, too minute and particular, and the language not unfrequently is quaint and affected; but those who can overlook these defects, will find their labour in reading the book compensated by meeting with many judicious sentiments and regulations for their conduct in every period of life, though not always expressed in appropriate terms.

"An apprentice," the author says, "who considers his future prosperity, by looking forward to credit as a practitioner, will see the necessity of being unimpeachable in his morals, frugal of his time, economical of his money, and dutiful to his parents, as well as respectful to his master; he will despise all deceptions, or indirect practices, and veracity will be his invariable rule. There are interwoven with the diseases of mankind so many frailties, that a negligent disclosure, or an unfeeling communication of the kind of indisposition, might often *involve a disrespect or injury to a trusty invalid*; and as assistants are sometimes necessarily entrusted with family concerns, they should never lose sight of the promise made in their indenture, to keep their master's secrets. Greater caution may be requisite, because an apprentice may not be able to judge of the bad consequences of betraying circumstances apparently trivial. As the day-book contains names and medicines of all his master's patients, an apprentice should be careful not to expose that book to any inquisitive visitor."

The words marked in italics are scarcely intelligible, and take off from the value of the remainder of the passage, which is rational and proper.

The author thinks professors should be appointed to examine pupils, at stated periods, during their apprenticeship. "Nothing would more effectually awaken the diligence of parents,

parents, of practitioners, and of pupils, than the establishment of suitable examinations at stated periods.

"It is in the early part of education that the abilities of students should be examined, since a defect at such a time may preclude necessary acquirements as a license to practise.

"If distinguishing tokens of studious proficience, and suitable qualifications were by law required, practitioners would be more cautious in their admission of apprentices, and parents would strive more to have their sons well educated; while lecturers and surgeons at hospitals would be more scrupulous as to the previous attainments of their pupils.

"When testimonials are unreservedly bestowed, when all sorts of students can gain admission, and share in marks of honour, the spur to useful exertions is blunted, and the very essence of necessary qualification is effaced. Immethodical students are apt to desert regular practice, and disgracefully imitate empirics; experiencing inability, they are anxious to conceal their ignorance. The encouragement of pretenders diminishes the number of regular students."

When the term of apprenticeship is completed, the pupil should be sent to London, and finish his education by attending one or other of the hospitals, and public lecturers. The same attention to regularity and economy, both of time and money, is now required as was found to be necessary in the early part of his education.

"The studies required," he says, "to qualify a surgeon-apothecary are numerous and costly; hence a pupil has no time to waste on amusements; if not before, when a practitioner, he would become sensible of the loss sustained by having neglected any of them; and if the expenses of subsequent studies have not been previously considered, they may exceed expectation or convenience. Except a student has a taste for the profession, and prefers it to other pursuits, he will find it difficult to attain a sufficient stock of knowledge for gaining subsequent proficience, or creditable success, as a practitioner.

practitioner. Could pupils be timely apprized of the future gratification and permanent advantages resulting from elementary acquirements, or the difficulties that must ensue from ignorance in practice, or in stemming the opposition of envious competitors, they would seldom neglect the present irrevocable opportunities of imbibing fundamental knowledge, and qualifying themselves for practising with success and credit."

The order recommended by the author, is to begin with anatomy and the materia medica, then to study the theory and practice of chemistry and of medicine, and lastly, of surgery and midwifery. Particular directions are given for the conduct of the student under each of these heads.

Under the article "medical library," the author recommends distinct lists or catalogues to be made of all the authors who have written on every disease. The labour of compiling such a work would be immense, but the advantage to students, practitioners, and writers, would be incalculable. The names should not be given, as he suggests, in alphabetical order, but according to the date or time in which the author lived. To make such a work complete, the titles of all essays and cases published in the journals and transactions of all the different societies in Europe should be added, as well as of those contained in Schenckius, Bonetus, Hildanus, Forestus, Bartholine, Morgagni, and a thousand others, which, for want of such a clue, are many of them buried and lost.

In Sections Sixty-three, Sixty-four, and Sixty-five, the author gives salutary admonitions to persons engaging in partnership; and in Section Sixty-six he treats of the arrangement of an apothecary's shop. Economical and prudential regulations are next laid down for the conduct of a young man setting out in life of the utmost importance to his future success; these, as the result of long experience, may be read with advantage. The conduct of the surgeon-apothecary in the sick-room, and to the family of the patient; the manner of

dressing

dressing wounds, of reducing dislocations or fractures, and of performing operations, with general observations on the profession, conclude this volume.

---

ART. VIII. *Esquisse d'un Cours d'Hygiène ou de Médécine, appliquée à l'Art d'user de la Vie et de conserver la Santé: extrait d'une Partie des Leçons d'Hygiène, faites pour la premiere Fois au Lycée Républicain, l'An* VII. Par J. F. MOREAU de la Sarthe, M.D. &c. Chez GABON, Paris. 1800.

THIS work is a part of the lectures on health, read for the first time at the Republican Lyceum in the year 1799. This excellent production presents three remarkable subjects: the first, which the author explains in his preliminary discourse, relates to his method of representing hygiene — as the grand total, the co-ordination of all the results which the physical knowledge of man can possibly offer to morality, to philosophy, to the art of preserving health, and to the improvement of our species. The second point relates to his divisions of medicine into sections connected with the various animal functions: this division is formed to shew how the exterior circumstances of life correspond with the interior, with that system of organization peculiar to the animal. His third point is devoted to the examination of the characters and functions of life, and the division of the natural history of man into nine sections. We here behold, 1. Man observed to procure a knowledge of the principal divisions of his body, his regions and proportions. 2. Man compared with other animals, in order to determine his place in the scale of living beings, according to his exterior characteristic marks. 3. Man relatively considered, from whence appear his different races and varieties. 4. Man compared with man, with respect to the differences arising from dispositions contrary to the general laws of nature. 5. Man compared with man, relative to the varieties resulting from

the

the physical expression of his sentiments, and from his moral character. 6. Man considered as to the difference of the sexes. 7. Man viewed as to his increase and decrease. 8. Man when he is ceasing to exist: and, 9. Man observed after his death.

Were we to dwell on every point which has arrested our attention, we should have considerable extracts to make from this interesting work. But we shall content ourselves with transcribing a note from that portion of the work which treats of the regimen of women. "In proving," says the author, "the necessity of the mother suckling her own child, in recommending this imperious and sacred duty, has Rousseau confined himself within the limits of possibility? has he viewed all the aspects, all the connexions of the question?

"That maternal solicitude which can never be supplied; the unhappy effects arising from the negligence of nurses; in short, the general effect which maternal suckling has on the manners of a nation, and its peculiar influence on the happiness of women: these are the different points which the philosopher of Geneva has treated with that eloquence, so imperiously persuasive, which characterizes him. But, at the same time, how many important observations have been forgotten! The moral side of the question is presented in every point of view; but the physical considerations are scarcely mentioned; and when called on to decide, whether, in all circumstances of life, the child must be suckled by its mother, or by a nurse, Rousseau does not resolve the question. He cuts short the difficulty, by affirming that there does not exist any obstacle to a mother's suckling her child, and that the infant cannot have any new danger to dread from the blood of which it is formed.

"Rousseau says, 'the mother's suckling a child is a duty.' I will say more, it is necessary to a woman just become a mother; but what law, what general rule is there without exception? Why, in an exclusive and rigorous manner, com-

mand women to suckle their children, who are unable to obey their commands, but at the expense of the child; who, originally weak, cannot be established and made fit to run the race of life with an equal and firm step, except by receiving its nourishment from a more wholesome and vigorous nurse?"

*Mag. Enc.*

---

ART. IX. *Gymnastics for Youth: or a practical Guide to healthful and amusing Exercises, for the Use of Schools. An Essay toward the necessary Improvement of Education, chiefly as it relates to the Body.* Freely translated from the German of C. G. SALZMANN, Master of the Academy at Schnepfenthal, and Author of "Elements of Morality." Illustrated with copper-plates. Octavo. 433 pages. JOHNSON, London. 1800. Price 9*s*.

THERE is no subject on which a greater variety of opinions have prevailed than on managing our offspring, so as to ensure to them the highest degree of health and vigour their constitutions are capable of attaining. One would imagine, that the experience of so many ages as have elapsed since the creation, or even since a large part of mankind have been acquainted with letters, and accustomed to record the result of their inquiries, might have suggested some general maxims for the attainment of this desirable end. But we know no such rule has yet been discovered. To what are we to attribute this want of success, in an affair in which we are all so materially interested? Not to a want of diligence, nor of genius, in those who have particularly dedicated themselves to the inquiry, or in mankind in general, for we are all equally interested in the event; but to the nature of the subject, which admits of no general or universal rule. Man being formed to live in every climate, must vary his conduct and mode of living so as to adapt it to the temperature of the place of which he is an inhabitant. A want of attention to this rule has operated

powerfully

powerfully in preventing this art from attaining the degree of perfection it is susceptible of. Another equally fertile source of error is, prejudice in favour of maxims that took their rise at periods so early, that no traces of their origin can be found. We know with what veneration men regard the customs of their ancestors, and with what difficulty they are led to renounce them. It is only within a very few years that we have left off swathing and confining the bodies and limbs of children, a few hours after their birth, in such a manner, that it seems wonderful how the powers of life could continue to exist under it; or how the lungs, the stomach, and liver, should be able to perform their functions. There can be no doubt that great mischief has been and is done, many constitutions injured, and many lives lost, by this practice, which is still continued in many parts of Europe; but as some children were preserved in most families, it was not easy to persuade the survivors, that many of those who died in their infancy were killed by being treated in the same manner they had themselves been managed. 'If you had but seen,' said my uncle Toby, 'what prodigious armies we had in Germany,' notwithstanding they were all swathed, we will add, in this preposterous manner!

We have thrown out these general ideas on the subject of managing children, as a prelude to the observations we may have occasion to make on the work we are about to examine.

The author introduces his subject by the following observations. "A sound mind," he says, "in a strong and healthy body, has been for ages the grand object of education. How is it then that we commonly forget the improvement of the body, though we are fully convinced, that neither wealth nor title, neither learning nor worth, can protect the feeble, the unhealthy, and the infirm, from the lamentable effects of their condition? Should you have nothing to bequeath your child, should you bestow on his mind but a narrow education, still he will bless you, if you form his body to health, strength,

and activity; whether he earn his simple meal, sweetened by labour, at the plough or the anvil, with the adze or with the hatchet. On the contrary, while you cultivate his understanding to the highest pitch, if you neglect the health and strength of his body, could you leave him the treasures of a Crœsus, the debilitated, suffering, wretched, helpless creature, would curse the education he had received, amid all the splendour of reputation, the glare of honours, and even the incense of a throne. Learning and refinement are to health and bodily perfection what luxuries are to necessaries. Is not then our education depraved, when it aims at a luxury, and neglects our greatest and most essential want? This thought is the foundation of my work; may it not only be laid to heart, but have a practical effect on education in general!"

"We are weak," he goes on to say, "because it never enters into our thoughts that we might be strong if we pleased." This position is attempted to be illustrated and enforced through the first fifty pages.

The mode, therefore, of attaining the degree of perfection we set off with deprecating the want of, according to our author, is supposed to be known, and it is only neglected through our perverseness and prejudice. But this knowledge could only be attained by experience; and the author, in fact, professes to ground his assertion on experience; but as he appeals to the experience of early times, we are afraid it will still be found to be only a prejudice arising from a wrong estimate of the degrees of health and strength enjoyed by our ancestors. "The hardy, active wife," he says, "of the ancient German, from whom we are descended, was frequently delivered in the open field, in the midst of her toil; she bathed her loved offspring in the nearest brook, and wrapped him in cool leaves: thus the open and serene sky canopied the puerperal bed. Frequently the labour of the field was continued. The dipping and bathing of the infant, on his introduction to the light of day, was probably a test of his sound state, and certainly

hardened his tender body. The child drew his nourishment from the breast of his mother, not from that of a nurse. Thus strengthened, he lay naked and bare on the cold ground, and gradually learned the use of his limbs. This leaving him in freedom to himself must have had the most beneficial consequences on the suckling; here nothing hindered his first slight movements, which quickly became more forcible, and soon of greater importance.

"The first treatment of children among people in the state of nature at this very day is precisely the same. It is too well known for me to waste the reader's time in copying from travellers; but one thing, observed by many, I must not pass over in silence—persons of deformed growth are very seldom to be seen among them.

"The infant grew up to a boy, and already accompanied his father to the chase; riding, hunting, and military exercises, together with the fresh, uncontaminated air, strengthened his faculties, sweetened his slumbers, fostered his growth, employed his mind, steeled his courage, established his resolution, and banished all effeminacy. He bloomed a youth. His sports became serious occupations, which his condition enjoined; and thus the youth was perfected to a strong, healthy, and heroic man.

"A simple garment covered his naked body but in part; he was satisfied with the skin of a beast thrown over his shoulders. It was not till late that the wealthy began to cut their garments, and fashion them somewhat more to the shape of their limbs. A great part of the body remained exposed to the free access of the bracing air. The head was never covered, unless the skin of some animal was drawn over it to terrify the enemy; and the legs, knees, and thighs, were a long time left bare.

"His diet was simple, consisting chiefly of the flesh of animals, sometimes roasted, sometimes boiled, frequently raw,

"The

"The women were educated in a similar mode; early accustomed to the fresh air, half-naked bodies, the bath, manual labour, and agriculture, which was entirely left to them. These were the most natural means of fortifying them against the pains and perils of childbirth. Equally natural was their moral education; the example of the parents guided the children; oral tradition was the teacher of the little scientific knowledge they had collected."

Without pretending to examine whether the picture here drawn of the manners of the ancient Germans, and of the present native inhabitants of America, may not be exaggerated, and whether what was peculiar to a few, may not have been ascribed to the whole, we shall ask, what was the effect of this ferocious treatment? Were a greater number of the children of the ancient Germans preserved to the age of maturity, or did men then live to a greater age than they do now? We believe the contrary to be the case. In respect to no deformed or decrepit persons being found among them, that might arise from their custom of destroying all the children that appeared to be feeble and unhealthy.

The author then gives a picture of the management of children, now generally adopted; he contrasts it, as well as the effects, with the former; and then triumphantly proclaims the superior excellency of the ancient method. He professes to avoid exaggeration: our readers will judge how far he has adhered to that resolution.

"Let us now take a peep," he says, "at our present mode of education. I will be faithful, and shun all exaggeration; for the copy of itself will be sufficiently striking. Gray Prejudice welcomes the stranger; there she stands in the shape of an old maiden aunt, trembling for fear of witches, and enjoins the process of debilitation. Thus the young citizen of the world no sooner issues from the womb than he is plunged into the warm bath, and buried in down. He is treated as one at the point of death; how then shall his health escape unimpaired?

unimpaired? Hence drugs accompany his mother's milk; his little limbs, so susceptible of injury, are fettered; frequently are they hurt by the very means taken to preserve them from harm; the whole of his little body, robbed of the cool air, lies immersed in a vapour bath composed of his own exhalations. Who will venture to check this deplorable debilitation of the skin, the muscles, the limbs? who will venture to strengthen the little infant, gradually, but speedily, by bathing in the brook, at the cold spring? who will allow him his liberty, even on a soft mattress only, disengaged from all impediments?—No one.

"The period of carrying the child in arms succeeds; instead of laying him in a recumbent posture, and leaving him to the free movement of his limbs, under careful attention, he is wrapped up in a cloke and carried about; instead of allowing him to prepare himself gradually for learning to walk, the nurse chooses rather to proceed methodically, and at last teaches him to walk by ill-chosen means. Does it not appear as if every thing were done, in the first year, to cramp the powers of the child, which would willingly unfold themselves? and can we wonder, that so many are rendered cripples by the treatment they receive in their infancy?

"The infant becomes a boy; he still remains principally under the care of his tender mother, and the parlour is his chief residence, at least in winter. In a short time he is moulded into a little man; the epoch of his being put into breeches is celebrated as a family festival, and a fur muff and tippet are considered as the most acceptable new-year's gifts. He is muffled up from head to foot; he reposes on a heating feather-bed; his diet consists of the complicated dishes in which adults indulge themselves; prophylactic and cleansing drugs are employed as the preservatives of his health."

This is rather a poetical than an historical description. It is taken from the manners of a few individuals, not from the practice of the people, by whom such luxuries are unattainable.

That

That too much heat relaxes and enervates, we know; but may not equal or greater mischief be done by exposing our offspring to an extreme degree of cold? The young of all animals are nurtured by heat, and yet are not, on that account, less capable, as soon as they have acquired the full use of their limbs, to bear the inclemency of the elements. The young of the human species are longer in acquiring their strength and ability to walk than those of any other beings, and on that account should be defended against the effects of wet and cold longer than others. The practice, therefore, of immerging children in rivers, or cold water, and exposing them to the air as soon as they are born, is not supported by analogy; and would, we believe, prove highly injurious, at the least in cold northern climates. They should be early, but gradually, inured to the impressions of the air. The author condemns, and with judgment, the custom of sending children early to school, and confining them to their seats. This, indeed, seems to be one of the most pernicious errors committed in the management of children; instruction should be subordinate to exercise; by taking a different course, by endeavouring to make children learned, instead of healthy and strong, we miss our end. Strength of body, which is only to be acquired by daily and long-continued exercise in the open air, invigorates the mind. "The weaker the body, the more it commands; the stronger it is, the more it obeys," says Rousseau; "the body must possess vigour to be obedient; a good servant must be robust."

After expatiating on the numerous evils consequent on the too delicate and luxurious manner in which children are commonly educated, and their being confined too early and too much to their studies, he proceeds to unfold his system of gymnastics, founded, he says, upon the precepts and practice of the ancient Greeks and Romans. "Excellent people," he apostrophizes them, "our minds are formed by you; why have we disregarded the precepts you have given us for the preservation

preservation and embellishment of the body? With you gymnastic exercises constituted the principal part of youthful education; their objects were hardiness, strength, and dexterity of body, elegance of form, courage, presence of mind in danger, and patriotism founded thereon. Plato and Aristotle," he adds, "considered a commonwealth as defective in which they were neglected; and indeed justly; for if the improvement of the mind ought to be our constant aim, and the mind cannot accomplish any thing of worth and importance without the aid of the body, assuredly it is incumbent on us to promote the health and dexterity of the body, that it may be capable of serving the mind, and assisting instead of impeding its operations. For this reason Plato, in Protagoras, calls him a cripple, who, cultivating his mind alone, suffers his body to languish through sloth and inactivity."

We shall now give an outline of the author's plan.

He begins with describing different kinds of leaping, with or without a pole, hopping, running, and shews their various uses and advantages.

"The leaper pitches," he observes, "chiefly on his heels; as, if he were to pitch on his toes, after a powerful leap, he would be in danger of falling on his nose: but, as the body is bent in this leap, the shock is not communicated through it in a straight line. The leaper must accustom himself, likewise, not to stop the velocity his body has acquired at once, on the spot where he pitches, by standing still, but rather allow himself to take a few gentle springs forward till the acquired velocity is expended. This can be done, however, only where the ground will admit. In leaping over a brook it is often impracticable, and in this case the leaper should pitch more on his toes.

"In this leap, as in all exercises of this kind, it is absolutely necessary to rise with both feet together, and not to make a stepping-jump, in which one foot goes before the other. This is dangerous, and must not by any means be allowed.

" When this leap is made with the pole, it is not necessary to swing the body round, as in the high leap.

" *Variety. The continued Leap.*

" If we would imitate the ancients, we choose a tolerably long, even course, and mark out the place from which to start. Here the young competitors assemble, and one of them begins. Having placed his feet close to each other on the appointed spot, he swings his arms backwards and forwards, his body a little bending, and at the most convenient moment springs forward as far as he can. From the place to which he comes he renews his leap without stopping, and thus he proceeds. All the rest follow him. The goal may be fixed, and in this case he who reaches it with the fewest leaps is victor; or it is not fixed, and the prize is obtained by him who advances farthest in a given number of leaps, or by him who takes the greatest number of leaps in succession. In the last case attention must be paid that a proper degree of exertion is made in every leap. This exercise is fatiguing to the muscles of the thighs; fifteen or twenty leaps breathe a person. To bring other muscles into action, this continued leap may be performed backwards likewise.

" The body of no animal," he adds, " seems better formed for running than that of man; the nobler parts, which might suffer from an immoderate influx of blood, are uppermost; and the laws of gravitation itself assist in propelling the runner forward: he has nothing to do but to strengthen his feet and thighs by practice, and accustom himself to speedy motion, and there is nothing very laborious in the exercise, as I am convinced by unquestionable experience. Indeed, I believe, I may venture to assert from experience, that it is very beneficial to the lungs; and that perhaps there is nothing better to strengthen the lungs of those who are short-winded, than gradually habituating themselves to the exercise of running. 'As 'soon as young children are expert at walking, turning, and 'the like,' says the sagacious Frank, 'running races, with 'proper precautions, is an excellent exercise for them'."

These

These exercises, although useful to the whole frame, in a more particular manner tend to enlarge and strengthen the muscles and sinews of the lower extremities. Jaculation, under which term is included slinging, throwing a dart, shooting with the bow, hurling the discus or quoits, which are next described, are peculiarly adapted to confirming and strengthening the muscles of the arms, shoulders, and breast.

"Galen admits," the author says, "the discus into medicinal gymnastics, we into scholastic, as a pleasing variety of the exercise of jaculation for youth. Quoits of strong, heavy wood, which are easily procured, may suffice for our purpose; and indeed these ponderous masses of metal appear to be adapted only to the well-exercised shoulder of a man. In using it we imitate the ancients exactly, but without employing any thong, as it is more safe to throw simply with the hand. If we be desirous of a mark, a stake fixed in the ground, with a small horizontal target on the top of it, is very convenient for the purpose.

"It is particularly necessary in this exercise, that the master call the attention of his pupils to the following lines of Martial:

> "'Splendida cum volitant Spartani pondera disci,
> Este procul pueri, sit semel ille nocens'."

Wrestling, which is next described, affects nearly equally the whole body. "An aversion to this excellent gymnastic exercise, which Tertullian calls a work of the devil, is of very ancient date; as at an early period it began to degenerate into a brutal contest for the amusement of the spectators. Accordingly, the opinions of the ancients respecting it are much divided; Galen reprobates it altogether, and would have it banished from every well-ordered state. He was inspector of the gymnastic exercises at Rome, practised them himself, and dislocated his shoulder in the 35th year of his age. Here he became intimately acquainted with the body of athletes, for whom his mind was filled with abhorrence; and no one

of the ancients has depicted them in such black colours as he has, though unquestionably they had a beneficial influence on the spirit of the people. In general, it is true, they deserved the picture he drew of them; and I perfectly agree with him in what he says respecting their mode of wrestling; yet I think, he ought to have distinguished between the natural exercise itself and its abuse; and have recommended that, while he reprobated this as an object of abhorrence. Clement of Alexandria held the practice of wrestling in disesteem, yet he recommended its use, when employed only to strengthen the body, and promote health. His view of the subject was more impartial, and therefore more just.

"The utility of wrestling with moderation, and in a proper manner, extends to the whole body. All the limbs are exercised in it, all the muscles called into action; the lungs are greatly strengthened, and the circulation powerfully promoted: and if it be true, that we should form the minds of youth to patience, firmness, and courage, no exercise is better adapted for the purpose than wrestling.

"*The wrestle for an apple, or a stick.* To impart strength to the hand and fingers in particular for grasping any thing firmly, an apple, or something similar, is held in it by one, while another endeavours to get it out. This exercise of the fist is very ancient; Milo was eminent for it; he defied any one to open his simply clenched fist, or to take out an apple held in it. If it be desired to exercise the arm at the same time, a smooth, round stick, three, four, or five feet long, is taken instead of an apple. The decision of the victory here is obvious.

"Thus we are arrived at the end of the ancient pentathlon. The exercises that follow were not all familiar to the ancients, though several of them were used in the gymnasia. These I shall notice as they occur."

The various modes of climbing, or of descending from a wall, building, or tree, succeed. "To strengthen the body, fortify

fortify the courage, and increase the truly useful capacity for escaping from various dangers, in case of fire particularly, climbing is one of the most advantageous exercises; and when it is taught systematically, and by due gradations, it is less dangerous than riding on horseback, or in a carriage.

"Nature seems originally," Dr. Frank observes, "to have formed man, who has to procure his food from lofty trees, for this exercise in particular; consequently it must be of a certain degree of utility to our bodies. But were it only that youth are thus familiarized, under good guidance, with various dangers, not always to be avoided in common life, and learn the great art of preserving the balance of the body in all cases, much would be gained by this. For men of the lower class, and the peasantry, the art of climbing is of more extensive utility; by means of it children become habituated at an early age to dangerous situations, and are thus secure from that dizziness, which is often fatal to many on the occurrence of danger. Without this art the soldier is in many cases incapable of acting; and every autumn hundreds break their necks or limbs by falling from trees, whom more exercise in this art would have saved."

Swinging, balancing, under which is included walking on a narrow plank, wall, or rope, walking with stilts, sliding, and skating on the ice, are next described, and recommended; dancing and military exercise follow: the former the author considers as only fit for children, but military exercise as of the utmost importance for all ranks and ages. "The soldier, in performing his exercise," he says, "exhibits a perfect pattern of subordination, and of a quick and exact execution of orders, that is highly astonishing. I am persuaded, that it would be very beneficial to introduce these into the daily management of youth; and that a well-conducted military establishment is desirable in schools, and in large families, where there is no end to jumping, running, screaming, forgetting things that are necessary, carelessness and disorder with regard

to

to articles of dress, &c. It is a pleasing spectacle when children and youths fly to their place at the word of command, arrange themselves in order, assume a good attitude, and march in a regular body wherever you direct it; and when they are accustomed to perform at command things of frequent occurrence, which are commonly accompanied with noise, bustle, and confusion, while all are running headlong together. To him, who has daily to do with a great many young persons, what I have said will be perfectly intelligible.

"Another motive that induces me to recommend military exercises is altogether gymnastic; this is the improvement of the carriage. Infinite numbers of young people are extremely careless and indolent with regard to gait and attitude; as a remedy for this, military exercises, and particularly the various evolutions that are connected with determinate positions of the body, are strongly to be recommended; and they are very agreeable to youth, provided, of course, we do not treat them as slaves, and drill them with the cane.

"It will readily be conceded also, that young people cannot be too early inured to difficulties to teach them patience, and harden them for a future period; for this purpose long marches of some miles are excellent; and if the road be barren of natural objects, or a speedy progress be desired, the regular military pace is extremely convenient."

The last bodily exercise we shall notice is swimming; and as the few rules laid down by the author for taking this very salutary and useful diversion appear to be judicious, and the fruit of much experience, we shall transplant them into our Journal.

"We choose," he says, "a convenient place in the neighbouring river, for ponds are not so agreeable; the banks are screened by bushes; the depth, with which we are well acquainted, is not too great, yet sufficient to admit of diving, and the current is gentle; the bank is perpendicular, and a few feet high, so as to afford a commodious situation for leap-

ing into the water. We undress ourselves singly behind the bushes, and put on a pair of linen drawers, reaching only half way down the thigh; we are not afraid of disordering our hair, for it is merely combed in the simplest manner. The following rules are deduced from my own experience with young persons.

" 1. A gradual progress should be observed. Beginners should be first taken to bathe in the latter part of a hot summer afternoon, because the water is then warmest. But,

" 2. The best time for bathing is the morning, very early, if possible; but on no account just after a meal.

" 3. The master will never suffer his pupils to go into the water when they are hot, but takes care that they suffer themselves to grow cool first: this he can ascertain by examining their armpits.

" 4. It is most eligible to leap into the water, and plunge the whole body under it instantly: they who cannot do this, may throw the water over their head with both hands. Diving, however, requires but little previous exercise; merely that of dipping the head frequently, and then crawling along under the water. When a person has acquired a facility at this, he he will soon be able to move himself under water at pleasure, and in a very little time will learn to leap into the water head foremost, and dart away like a fish.

" 5. Five or ten minutes are sufficient to refresh the body, and strengthen the nerves. A pair of worsted gloves, or a piece of flannel, should be used to rub the skin, which will then be cleaned and invigorated.

" 6. I do not think it necessary to refrain from bathing on account of a cold or cough; but such a case will seldom occur, for young persons, who are in the habit of using the cold bath, seldom know any thing of these complaints, if their way of life be in other respects answerable to this practice.

" 7. Every person who bathes should wipe himself dry as soon as he gets out of the water, and dress himself speedily.

A little

A little exercise after it is beneficial; if the bathing-place be a quarter of an hour's walk from the house, the returning home is sufficient."

Observations on the modes of improving some of the internal organs, and on exercising and quickening the senses, occupy the last section. The lungs may be strengthened, the author observes, by reading and declaiming, the eye taught to measure distances, and the hand to perceive the weight of objects, with a considerable degree of accuracy, by use and observation. Rules for acquiring this acuteness of perception are laid down; but what we have already said will be sufficient to draw the attention of our readers to the work, which, though too prolix, and perhaps attributing too much importance to the subject, may be consulted with advantage.

---

ART. X. *The Principles of English Farriery vindicated; containing Strictures on the erroneous and long-exploded System lately revived at the Veterinary College; interspersed with cursory Remarks on the Systems of Solleysell, De Saunier, De la Fosse, &c. &c. In which is fully displayed the Superiority of English Farriery over that of foreign Nations.* By JOHN LANE, A.V.P. late of the second Regiment of Life Guards. Octavo. 97 pages. RIEBAU, London. 1800. Price 4*s.*

THE author is extremely angry with Mr. Coleman for saying the farriers are in general men of no education, and the greater part of them very ignorant of their business; and that for want of knowing the structure of the parts that are diseased, they frequently apply remedies, and perform operations, which rather aggravate than relieve the complaint they undertake to cure. This reproach against farriers we have heard so often, and at such various places and times, that we are persuaded it is too well founded. We, therefore, cannot help thinking the public are indebted to Mr. Coleman, for the specimen he has

has given of the anatomy of the horse's hoof, and the ingenious observations he has made on the proper shape and office of the shoe, which we hope farriers will study, imitate, and improve, that the art of shoeing may at length acquire the greatest degree of perfection it is capable of. At the same time we are not insensible of the merit of Mr. Lane, who appears to have a considerable portion of knowledge in his business, and to have produced a useful work on the subject, which Mr. C. we have no doubt, will profit by. We admit, with him, that farriery is a practical art, and can only be completely learned at the forge.

"If a man," he says, "is to give proper instructions to shoe horses, it should be at the anvil and foot; the shop should be his lecture-room, and the work in hand at the time; the pupil's attendance should be constant for twelve hours every day; he should continue, at least, seven years, and seek for further improvement from others and his own observations seven years more, before he attempt to write on the subject."

We still, however, presume it can be no injury to him, or any farrier, to be more completely instructed in the anatomy of the horse, than they have opportunity of being at present.

---

ART. XI. *Dissertatio de Febribus intermittentibus præcipue medendis.* Auctore HENRICO XAVIER BAETA, Lusitano. Octavo. 68 pages. PILLANS and SONS, Edinburgh. 1800.

THIS Dissertation is dedicated to Dr. Darwin, and ushered in by a quotation from Zoonomia, to the doctrine contained in which the author is an entire convert. He not only endeavours, therefore, to account for the symptoms occurring in intermittents, but for the modus operandi of ipecacuanha, bark, opium, and the other remedies employed in removing them, upon the principles laid down by Dr. Darwin, and his great precursor Dr. Brown.

The Dissertation is divided into four sections. In the first the author discusses the question, whether a tertian should be suffered to run its course, and allowed to terminate spontaneously, which some others suppose it would do, at the end of the seventh paroxysm; or whether we should have recourse to emetics and other remedies to interrupt and shorten its course. He concludes with Drs. Gregory and Fordyce, that obstructions of the abdominal viscera, the supposed consequences of checking the fever too early, more frequently occur when the constitution has been injured by the long continuance of the fever, and therefore advises to resist and extinguish it as speedily as possible. In the second section the author attempts to explain the causes of the cold and hot fits in intermittents, and the curative indications thence to be deduced. In the third section he treats of the remedies that have been found most powerful, and which are most commonly had recourse to in curing intermittents: and in the fourth, of certain remedies which have been introduced into practice with the same view, but which, being of more doubtful efficacy, or the reputation of them not being so well established, are to be used with more caution. Among these we find frictions on the skin with opium, or the cinchona. These were first recommended, he says, by Dr. Chiarenti and Dr. Brera, Italian physicians. The bark or opium are to be reduced to a fine powder, and then mixed with the gastric juice, saliva, or any other animal fluid, *(quere, with blood?)* and rubbed on the skin: the author does not say in what quantity or on what part of the body they should be rubbed. Affusion of cold water on the surface of the body, breathing superoxygenated air, and the internal exhibition of phosphorus, are recommended; the latter is on the authority of Leroy, from whose account of its effects, our author says, it appears to act in the same manner as opium and other powerful stimulants: but as phosphorus is rather a dangerous medicine, further experiments are required, both to ascertain in what dose and under what circum-

circumstances it may with safety be exhibited. The following preparation is selected by Dr. Baeta, in preference to any other:

"Injiciatur phosphorus in aquam calidam, qui statim liquescit: agitata phiala vel vase, aqua frigida injiciatur, et statim sedimentum in fundo vasis deponetur, cujus grana duo cum duabus olei guttis et vitelli ovi pauxillo commisceri debent. Hujusmodi mixtura in mortario vitreo, in nivem vel aquam frigidam, immerso, collocetur et probè teratur. Hujus præparationis sumat æger unam partem, quæ quartam grani partem phosphori habeat."

---

ART. XII. *A Treatise on the chemical History and medical Powers of some of the most celebrated mineral Waters; with practical Remarks on the aqueous Regimen. To which are added, Observations on the Use of cold and warm Bathing.* By WM. SAUNDERS, M. D. F. R. S. Fellow of the Royal College of Physicians of London, and Senior Physician to Guy's Hospital. Octavo. 483 pages. PHILLIPS, Lombard Street, London. 1800. Price 8*s*.

ACCOUNTS of the principal mineral waters of Britain, as well as other countries, written by Rutty, Lucas, Short, Shaw, Elliot, &c. already exist. In proportion as the discoveries in chemistry enable us to extend and correct the analyses of the substances contained in these waters, new observations on them become from time to time necessary, in order to disseminate the knowledge thence produced.

The recent improvements in chemical knowledge, which have taught us to decompose water itself, and shewn that what was formerly considered as an elementary substance, is in fact a compound, seem to render the present time peculiarly fit for a publication on the subject of mineral waters; while the increasing custom of resorting to their most celebrated

sources, whether it be occasioned by disease, opulence, or fashion, almost ensures such a work a favourable reception. Convinced of its utility, we are happy to see the subject taken up by an author, in whom is united the knowledge of a philosophical chemist with that of an experienced physician.

It being impossible that any individual can be personally acquainted with the composition and medicinal efficacy of the various mineral waters alluded to in such a publication as the present, a considerable part of it must necessarily be compiled from the different tracts written on the virtues of particular springs. In these a great mass of useful information is to be found, of which the author has made a judicious selection: and frequently we find the partiality of an experimentalist for his particular subject corrected by the observations of a more disinterested observer; so that in some respects a work of this kind is to be preferred to the originals.

In most of our late publications on mineral waters, too much importance is attached to the chemical analysis of the waters treated of. Such investigations tend, indeed, to convey an idea of the ingenuity and acuteness of the operator, but are of comparatively small utility in determining the salutary effects of the substance analysed. The virtues of the principal thermal waters were acknowledged, and their assistance resorted to in the cure of diseases, before chemical analysis was thought of. And even now that we can discover the gaseous constituents of many of these waters, we are still ignorant of the separate operation of these agents on the living body, as we cannot explain the effects of the minute portions of solid materials contained in them, by any comparison with the quantities of similar matters given in the form of medicine. If some springs occasionally fall and others rise in public estimation, philosophy can claim but a small share of merit in effecting this change, by pointing out the inefficacy of the one or the utility of the other. From personal experience we can affirm that the mineral waters of

Kilburn

Kilburn and of Hampstead bear no small resemblance, both in their constituent parts and in medicinal efficacy, to the celebrated springs of Cheltenham and of Tunbridge; and at one period they were no less resorted to. Now they are so nearly forgotten, that in the work before us they are scarcely noticed. It is in fact the tide of fashion that carries the idle in summer to the sea, and in winter to Bath; although every observer has declared the virtues of the latter to be more active in warm weather than in cold. To account for the benefit invalids derive, or suppose they derive, from these occasional changes of residence, many other circumstances must be taken into account besides the constituent parts of the water which they drink, or the temperature of that in which they bathe.

In this as in every other department of medicine, we can deduce practical conclusions only from a comparison of authentic facts. Were a faithful register kept at every watering-place, describing the cases of the invalids resorting to it, and detailing accurately the effects of bathing or drinking, we should sooner be enabled to form a just estimate of their respective virtues than by the most accurate chemical investigation that can be instituted.

The grounds for forming a judgment of this kind, still are, and perhaps ever will remain a desideratum. A writer on any peculiar mineral water is generally too far influenced by local circumstances to give a strictly impartial account of its virtues. Cases of its successful use are therefore only mentioned. In a work like the present, the author of which cannot be supposed to be biassed in favour of any particular spring or fountain, we might look for more correct opinions; and we probably should find them, were the only sources from whence they can be derived less polluted.

In the first chapter, on the chemical constitution of water, and its powers under various natural combinations, perhaps more time is spent on the statement and refutation of the exploded doctrines of water containing a quantity of atmospheric

spheric air, and of earth, than they deserve. The following observations on its decomposition are interesting:

"The principal facts to the explanation of which the decomposition of water has materially assisted, are, various circumstances in the solution and oxydation of metallic bodies; several of the most important changes that take place in the vegetable kingdom, such as that of their giving out oxygen gas in sunshine; the formation of oils, resins, and other inflammable bodies, during their growth; the conversion of sugar into ardent spirit during fermentation; and the ultimate analysis by the process of spontaneous putrefaction. It still remains for chemistry to determine whether the decomposition of water performs any material part in the changes that are going on in the living animal. It is certainly by no means an improbable conjecture, since the materials of animal bodies are such as are peculiarly liable to change, and especially as the process of animal putrefaction is supposed to be principally brought about by the decomposition of water assisted by a moderate temperature; and therefore the same materials, under the same circumstances of heat, may possibly undergo somewhat of a similar decomposition even during animal life. As this subject, however, is entirely confined to the regions of conjecture, and not connected with our present inquiries, we shall take no further notice of the ultimate decomposition of water."

In the second chapter, "on the foreign contents of mineral waters," the following substances are noticed, and the chemical tests by which they are distinguished, viz. common air, carbonic acid, hydrogen, sulphurated hydrogen and azotic gases; calcareous, magnesian, and aluminous salts; soda and ammonia; alkaline neutral salts; iron and copper; bitumen; siliceous and aluminous earth; alluvial matter. The scientific inquirer will find an accurate and perspicuous detail of the most approved means of detecting the various impregnations of mineral waters.

*Chap.*

*Chap. III. On the particular Waters in common Use.*

"There is a great variety of waters employed in the preparation of food, in manufactures, and domestic purposes, where the object is to use a simple pure water; and all the foreign matter which the liquid may contain is considered as detrimental, or at best useless. Some notice of these is requisite on account of the abundant daily use which we make of them, and the various substances which they contain should be noticed, as they here constitute mere impurities, some of which are innocent, others prejudicial; some may be got rid of by simple methods, others can only be removed by chemical processes, which can seldom be adopted for common use. As the standard of perfectly pure water, we must have recourse to that which is artificially purified by distillation, for every natural water contains some foreign ingredients; and the excellence of these waters is directly in proportion as it approaches in properties to that which is distilled."

The author considers water in the usual scale of purity, beginning with distilled water, and describes the common modes of getting rid of its impurities by subsidence, filtration, &c.

Introductory to the chapter on particular mineral waters, the author informs us that he proposes to give an account of some of the celebrated mineral springs that are employed medicinally; especially those of our own country, or which are imported from foreign parts, and used in this kingdom as medicines, and are of acknowledged efficacy and established reputation. A complete history of every circumstance which is interesting to the scientific and medical inquirer, relating to any mineral water, embraces a number of particulars, all of which contribute to give a clear idea of its properties, and to determine the choice of the invalid.

It being impossible, consistently with the limits of our publication, to follow the author through the detail of all the various mineral waters of which he gives an account, we shall content

content ourselves with acquainting our readers, that they will find a faithful, judicious, and, we may add, an elegant account of the following:

| | |
|---|---|
| Malvern | Spa |
| Holywell | Pyrmont |
| Bristol | Cheltenham |
| Matlock | Scarborough |
| Buxton | Vichy |
| Bath | Carlsbad |
| Sedlitz | Hartfell |
| Epsom | Harrogate |
| Sea | Moffat |
| Seltzer | Aix |
| Tunbridge | Borset, and Barege. |

As a fair specimen of the author's manner, we shall make some extracts from his account of Bath, and its thermal springs.

"The city of Bath is situated in a deep narrow valley, on the banks of the Avon, in the county of Somerset, a few miles higher up that river than Bristol, and at the extremity of its navigable course for small vessels from the Bristol Channel. The country around is composed of hills of a moderate height, generally steep in their sides, and pretty uniform in their outline; and of contracted valleys, highly fertile, and well cultivated. The valley which is decorated by the beautiful city of Bath is confined on all sides by lofty hills, which block up every outlet except those that admit the Avon, which takes a fine serpentine course through a rich vale, and bounds the city from the north-east to the south-west quarter. The view, therefore, from the neighbouring hills is rather confined; but, besides the natural advantages of the place, it possesses that noble assemblage of splendid buildings, decorated with a profusion of elegant architectural ornaments, which have justly entitled modern Bath to the pre-eminence in beauty over all the towns of our island.

"The

" The city of Bath has been celebrated for a long series of years for its numerous hot springs, which are of a higher temperature than any in this kingdom, and indeed are the only natural waters which we possess that are hot to the touch; all the other thermal waters being of a heat below the animal temperature, and only deserving that appellation from being invariably warmer than the general average of the heat of common springs. These waters, which have at first given celebrity to this spot on the banks of the Avon, and have been the means of erecting and supporting a splendid city, are now eminently accommodated to the use of invalids, by the erection of elegant baths, and by various other buildings calculated for convenience or amusement.

" There appear to be three principal sources of these waters, called the King's bath, the Cross bath, and the Hot bath. These springs all arise within a short distance from each other, at the lower part of the town, and not far from the Avon, *into* which the hot water terminates, after having passed through the several baths. The supply of water is so copious, that all the large reservoirs used for bathing are filled every evening with water, fresh from their respective fountains. There appears to be a slight difference in the properties of the water of each of these three baths, which we shall take occasion to notice, where it gives rise to a selection in their medical use.

" The sensible properties of Bath water are the following: when first drawn, it appears quite clear and colourless, and remains *perfectly quiet*, without sending forth any bubbles, or giving any signs of briskness or effervescence. I mention this last circumstance particularly, and from my own observation, as it has been asserted by some writers on this subject, that the fresh drawn water appears brisk and sparkling, as if it were strongly impregnated with some gas; which is certainly a mistake. This appearance can never be depended on, till the first agitation arising from the pouring

out the water be gone off, and when the truly gaseous waters, such as the Seltzer or Spa, will continue to emit bubbles, though merely exposed to air of the ordinary temperature."

The writer of this article (speaking also from recent personal observation) must take the liberty of observing, that there really is a peculiar and very obvious agitation in Bath water, as drawn from the pump, which, though it does not amount to effervescence or sparkling, may perhaps with propriety be termed mantling; and resembles very much the motion of water in a glass, when the finger is drawn round the edge so as to produce sound, forcibly impressing the mind with the idea of the synchronous escape of some subtile gaseous matter. That something does escape at this time is further corroborated by the fact, that in a very few minutes Bath water has no longer the taste it possesses when recently drawn from the spring. May not this change depend on the escape of caloric? If we suppose the various ingredients which enter into the composition of Bath water to be held in solution at a certain temperature, the moment this changes a separation must take place.

The author observes, that the Bath water, on standing in the open air for some hours, "becomes somewhat turbid by the separation of a pale yellow ochery precipitate, which gradually subsides. The quantity of this sediment is extremely small, but is sufficient to give iron-mould stains to the linen of the bathers. The water still remains slightly turbid and of a whey colour, after the ochre is precipitated, but does not actually deposit any other substance in any ascertainable quantity. No odour of any kind is perceivable by the nicest sense from a glass of the fresh water; but from a large body of water, such as the King's bath just filled, a slight degree of pungency strikes the nose, similar to that of an effervescing mixture, but, according to Dr. Falconer, never accompanied with any thing fetid or sulphureous. The taste of the water deserves particular attention, from some peculiarities that attend

tend it. When hot from the pump, it fills the mouth with a strong chalybeate impression, without any particular pungency, and accompanied with scarcely any kind of saline taste; on this account it is by no means disagreeable, and may be taken in a larger draught without disgust than most other waters in which the taste of iron predominates: what is remarkable, however, is, that as soon as the water cools, even before there is any sensible precipitation, the chalybeate taste is entirely lost, and nothing but the slightest saline sensation to the tongue remains; or rather, there is then no distinguishable difference between this and common hard spring water."

It is very singular, that of these celebrated waters we do not yet possess an accurate chemical analysis. The gas that bubbles up from the spring was never examined till Dr. Priestley took the trouble to ascertain its nature; and still more recently, Dr. Gibbs has discovered that they hold in solution a considerable portion of siliceous earth. The following is the present opinion relative to their contents:

" From the various chemical investigations that have been mentioned, we may form this general conclusion concerning the composition of Bath water; that it contains a good deal of calcareous salts, which render it hard and unfit for domestic purposes: that it holds in solution but little if any neutral alkaline salts, and therefore is scarcely saline; that it is in a very slight degree impregnated with carbonic acid; in a still slighter with iron, and as it should appear, only when hot from the spring; and that it holds suspended a small portion of siliceous earth, which will deserve notice from the chemist, as a curious, though not a singular occurrence. The precise quantities of all these ingredients it is not easy to determine, on account of the difference in the result of experiments made by different persons, none of which are at all improbable, as there are many waters that contain less foreign matter than the lowest estimation, and more than the highest.

"Perhaps we shall make a pretty near approximation to the truth, if we reckon a gallon of the King's bath water to contain, for its gaseous contents, about eight cubic inches of carbonic acid, and the same quantity of air nearly azotic: for the solid, about eighty grains, in the whole of which perhaps one half may be sulphat and muriat of soda, fifteen and a half grains of siliceous earth, and the remainder selenite, carbonat of lime, and a very minute portion, scarcely appretiable, of oxyd of iron."

*(To be concluded in our next.)*

---

ART. XIII. *Bibliothéque Germanique médico-chirurgicale.* Par les Citoyens BREWER et DELAROCHE. Tome IV. No. 22. Messidor, An VIII. Paris. Imported by DE BOFFE.

ONE number of the present work is published every month, in octavo. Its design is to exhibit the progressive improvements in the healing art, which take place in Germany and the North: but the editors sometimes admit papers and analyses of works published in other countries.

The last number we have received (viz. the 22d) contains an extract from Loder's Journal; a case of empyema by Mr. Benjamin Bell; extracts from Dr. Haygarth's pamphlet on Perkinism, &c.; and a letter from M. Humboldt, on the application of galvanism to the practice of medicine.

To those who do not peruse the originals, this work will be a valuable acquisition; but, as most of the German publications, from whence the editors have compiled their materials, are already in our possession, and the rest are not very difficult to be obtained, we propose to lay before our readers such an account of their contents as shall supersede the necessity of analyzing the *Bibliothéque Germanique*. We have thought proper, however, to announce this work, as it may be interesting to many English physicians and surgeons.

MEDICAL

## MEDICAL CORRESPONDENCE.

Art. 1. *Case of a remarkable Swelling of the Testicle, &c.* By Professor OSIANDER, of Goettingen.

(With an Engraving.)

**P. J.** of Milan, a tall robust man, about 28 years of age, applied in the month of December last year at the Royal Clinical Institution for advice, on account of a swelling of the scrotum, by which he had become entirely incapacitated for following his laborious profession as a worker and dealer in tin-ware.

Concerning the origin of the swelling, and the previous condition of his genital organs, he gave the following account:

From his infancy he had no scrotum, nor any external appearance of testicles. He had not been castrated: that he knew for certain. Since the age of puberty he had several times had emissions of semen; he had been married for some years past, and had two children by his wife, who was then living.

In September last year, on his return from Germany to Italy, having bathed his feet one very hot day in cold water, his right foot became swelled, and knotty tumours appeared, which afterwards broke and produced ulcers; for which a variety of remedies were employed, during a considerable space of time, but without effect. At length, on his return from Italy in the preceding spring, an army-surgeon cured the ulcers of his foot, in the space of a single night, by the use of a blueish powder and a gray plaister.

In the course of this journey from Milan to Holzmuenden, as he was travelling down Mount St. Gothard, with a heavy load upon his back, he fell forwards upon his breast with such violence, that he had scarcely power to raise himself up. Since that time he had been affected with pains on the right side

side of the thorax, and a swelling appeared under his short ribs. Nevertheless he proceeded on his journey, and performed the whole route from his place of abode on the Lago Maggiore to Holzmuenden, situated on the Weser, on foot, in seventeen days!

After some time, the swelling under the short ribs disappeared: now a tumour formed itself in the region of the scrotum, which at first was about the size of a walnut, and very painful; but as it gradually grew larger the pain was diminished in proportion. In the recumbent posture, it sometimes grew smaller, but never disappeared altogether. Many medical persons, to whom he applied, conceived it to be a hernia. Unctions were prescribed; and one surgeon, with a view of discussing the tumour, applied warm poultices of herbs to it for some time; by which, however, it was rather increased than diminished in size.

When the patient applied at the Clinical Institution, his countenance was of a pale yellow cast, his eyes dull and languid, and his demeanour bespoke the depression of his spirits. His pulse was not strong, considering his robust habit of body; neither had it any feverish velocity. He complained that he was much too weak for his usual occupations; that he had frequently been affected with cramps, obstipation, and a contraction in his right side, and that formerly he had several times thrown up round worms by vomiting.

The state of the swelling was as follows: under the penis, on the right side, a tumour about double the size of a man's fist was observable, having that brownish and corrugated appearance which the scrotum usually exhibits. From the situation of the penis, however, it was evident that only one half of the scrotum was protruded. The tumour projected in such a manner as to resemble a goose's egg, situated transversely (not perpendicularly, as is generally the case in swelled testicles) under the penis. (See the plate, fig. 1.)

The tumour might be pressed with an astonishing degree

of

of force without occasioning the smallest pain to the patient. It had an elastic feel, and it seemed to me as if it was chiefly filled with some gelatinous liquid, like the swelled scrota of new-born infants. On the right side, above the tumour, the vessels appeared to be greatly infarcted, and in one particular spot they felt so hard, that the patient imagined there might be some small bone contained within the swelling.

Upon pressing the tumour between both hands, I could perceive that a globular moveable substance was contained within the thick stretched skin. From the region of the right abdominal ring, a substance of the thickness of a man's thumb descended into the imperfect scrotum. This part could not bear to be pressed with any degree of force, without occasioning considerable pain to the patient.

On the left side of the penis, no testicle or swelling of the abdominal ring was discoverable.

The region of the pubis and the scrotum was covered with a great number of strong hairs; the man also was bearded like others in whom the genital organs are in their perfect state.

Having examined the tumour in presence of the students who attended the Clinical Institution, I entered the following report of the case in the journals:

"Tumor scroti incompleti, sine dubio a testiculo dextro tumido, qui cum altero, adhuc absente, a nativitate in abdomine reconditus fuerat, ante dimidium annum vero, post lapsum vehementem in pectus, per annulum abdominalem laceratum, et vi expansum, in scrotum descendit, and in tumorem presentem, a pressione vasorum deferentium et funiculi spermatici resorbentium, abiit."

It was then resolved to rub into the region of the right abdominal ring an unguent. anodynum, ex ol. hyosc. et tinct. theb.; and upon the tumour itself a discutient ointment, composed of liniment. volat. camphorat. et cerat. saturn. On account of the ulcer in the leg, which had been so rapidly

healed up, an issue was made in the right thigh, in order to draw off any matter that might have been transmitted by metastasis into the scrotum. Internally the patient was ordered to take flowers of sulphur, with cream of tartar; especially as he complained, that for a long time past he had only had one stool in three or four days.

After the first employment of these remedies, the patient seemed upon the whole better: the tumour had become somewhat softer, but its size was very little diminished.

The internal and external application of the remedies was continued.

Jan. 8. The patient applied again at the Institution, when the swelling seemed rather to have increased than diminished. We proposed to him to have an incision made into the scrotum. We informed him that we did not intend to lay open the whole scrotum, but only to make a small cut, in order to ascertain what were its contents. After some hesitation he submitted, saying, "He knew there was no other help for him."

The patient was then laid in a horizontal posture, and after the requisite preparations, I first cut perpendicularly through the common integuments, which were doubled into a fold, making a wound about an inch in breadth on the right side and over the softest part of the tumour. The tunica dartos was now visible, of a blueish white colour, and of a membranous texture; under which a quantity of coagulated blood seemed to shine through. Upon making an incision into this coat of equal length with the external wound, a great quantity of black extravasated blood issued from it. The cellular texture was dilated in various directions with coagulated blood, and the whole dartos was at least an inch in thickness.

The incision into the dartos was first made with a pointed bistory; a conductor was then introduced, and the cut enlarged to about the length of an inch with the bistory of Pott. The

cutting

cutting of the dartos did not appear to give the patient so much pain as that of the common integuments.

I now felt with my finger a third tunic, which seemed filled with a very soft matter. This I conceived to be the albuginea of the testicle, but thought it neither necessary nor safe to cut any deeper.

After the blood extravasated in the cellular texture and the varicose vessels of the dartos had been discharged, the scrotum appeared somewhat smaller. This discharge did not amount to more than four or five ounces.

The wound was now filled up with lint, and proper dressings were applied; and the patient found himself so well immediately after the operation, that he took some meat and drink, and went home in tolerably good spirits.

He was then put to bed, made no complaint of pain, and at eight o'clock in the evening, when the surgeon visited him, his pulse shewed no symptoms of fever.

During the night he slept quietly for some hours, after which he awoke, and was seized with a fit of vomiting. As he had had no stool on the preceding day, an injection had been administered immediately after the operation; but it returned without producing any evacuation of fæces.

Towards morning he passed both urine and fæces. He was again seized with vomiting, and threw up a great quantity of bile.

Jan. 9. In the forenoon I visited him, and found him seemingly pretty well. His pulse was rather quick, though hardly so much so as to indicate the presence of fever. The pain from the wound, he said, was very insignificant. The size of the scrotum was very little less than it had been before the operation; the wound looked clean, but it discharged no pus, instead of which an ichorous matter flowed from it, of an extremely fetid smell.

As his tongue was furred, and as he had had no regular stool for two days, besides having vomited a great deal of bile,

I ordered injections, and a draught with manna and cream of tartar.

As soon as he had taken the draught he vomited it up again. He had, however, three stools, and several evacuations of urine.

In the course of the following night he was restless, frequently wished to rise, and sometimes talked incoherently. The discharge of fetid ichor from the wound continued.

Jan. 10. His delirium increased, he was continually spitting, and frequently applied his hand to the scrotum; his pulse was small and quick, and the wound not only discharged an intolerably fetid ichor, but such a quantity of flatus of an hepatic smell proceeded from it, with a loud noise, that one might have thought the wound communicated with a perforated intestine, and that the fetid air proceeded from thence. However, not the smallest appearance of alvine fæces was observed in the ichor.

A saturated decoction of cinchona and valerian was given internally; an ointment composed of willow bark and honey was introduced into the wound; and a liniment of the infusion of Peruvian bark with lime-water was applied to the scrotum.

In the night following, the symptoms were aggravated. He was seldom sensible, and that only for a few moments at a time; was very restless, his delirium high, and he discharged both urine and fæces involuntarily.

A great quantity of air was still discharged from the wound, with the same noise and fetid smell as before; and he seemed to swallow his medicine with great difficulty.

On the 11th, at eight in the morning, his pulse was scarcely to be felt, his extremities cold, respiration extremely difficult. He lay in a state of insensibility, and about nine in the forenoon expired in a tranquil manner.

The scrotum shewed no external appearance of gangrene, but it still discharged fetid ichor. Shortly before death the body was not emphysematous. An account of the appearances on dissection will be given in our next Number.

Art.

Art. 2. *Further Remarks on variolated vaccine Matter, and on Mr. Malim's Case of Cow-pox.* By Mr. RING, Member of the Royal College of Surgeons in London.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

IN your Seventeenth Number you inserted, at my request, some remarks tending to prove that vaccine matter is sometimes variolated at the Small-pox Hospital; and that matter disposed of as cow-pock matter at the Small-pox Hospital had in several cases produced the small-pox. I have since heard of three additional instances where such matter was received from the same quarter. This shews that much greater caution is necessary in the practice of vaccine inoculation than has hitherto been used.

Since writing my last remarks, I have made further inquiries concerning a case at Woolwich; and am authorized by my correspondent to say, that Dr. Irwin gave a clean lancet to Dr. Woodville, requesting him to arm it with pure vaccine matter. With this lancet, when returned, the Doctor inoculated an officer's child, the first who was inoculated with supposed vaccine matter at Woolwich; and produced a case of small-pox, attended with considerable danger.

This inclines me to believe, that the matter employed by Dr. Woodville is not so pure as he imagines; and although, by his prudent manner of taking it, and avoiding secondary pustules, much of the virulence of the matter is lost, yet it will occasionally shew itself again;

Naturam expellas furcâ, tamen usque recurret.

One other point deserves consideration. Is it of advantage to the public that any species of inoculation should still be practised at the Small-pox Hospital? For my own part, I must confess, that, however useful it has heretofore been in

that respect, its utility ceased on the introduction of the new practice by Dr. Jenner. Either that Augæan stable ought to be cleansed, or to serve as a mere pest-house for the reception of such as are seized with the natural small-pox. It was not designed to propagate that disease, nor to disseminate a deadly poison.

I have been informed that the inoculation of the small-pox has been discontinued at the Small-pox Hospital above three months; yet I have known that disorder produced by inoculation at that place within this period, and a child in the same house infected thereby. This reduces us to the dilemma of concluding that the report of the professed discontinuance of inoculation for the small-pox at the Hospital is premature; or that the vaccine matter is become variolated, and sometimes engenders that dreadful disease.

In either case the effect will be the same, in a certain degree; and wherever we lop off one head of the hydra, two or more may spring up. Thus all our efforts to extinguish the dire pest may be frustrated; and that structure which was intended as a receptacle for those labouring under a baneful distemper, may, either through accident or error, become a reservoir for the virus, and a fruitful source of contagion.

As one reason for the necessity of greater caution in the inoculation of the cow-pox, I stated that this disease will not always supersede the small-pox; contrary to the opinion of Dr. W. when he published his first pamphlet. This opinion, it is true, is not directly expressed; but, I apprehend, it is clearly implied in his pamphlet. He there states, as a reason for his inoculating some of his patients with variolous matter, who were also under inoculation of the cow-pox, that several of them were so circumstanced as to be constantly exposed to the infection of the small-pox. This, he says, he did on account of his "having then had no proofs that the progress of the infection of the former would supersede that of the latter."

From this expression, and from Dr. W.'s having since discontinued

continued the precaution, although the same cause in a certain degree still existed, it is no unfair inference to conclude that he supposes the progress of the cow-pock infection will always supersede that of the small-pox.

That the cow-pox will always prevent the small-pox, when had recourse to in time, we have great reason to believe; that it often supersedes it, appears to me probable, from a number of instances that have fallen under my observation; but that it will not always supersede it, I asserted in my former communications, and could, if necessary, bring abundant proof.

Three instances where it failed to produce this happy effect had then occurred in the practice of a gentleman to whom I had given vaccine matter; one of which I had seen. Another occurred to the same practitioner since that time. The subjects were paupers in a workhouse. They had been in the house from one day to a week, at the times of their respective inoculations. The small-pox raged both within and without the walls of that house; so that no certain inference can be drawn with respect to the time, after which the vaccine cannot supersede the variolous infection.

In two of these, the small-pox appeared when the cow-pox was at its height; in the other two, not till the termination of that disease. In one case of each description the small-pox proved fatal; but even this fatality was less than that which had prevailed previous to the introduction of vaccine inoculation into the house; where, till that period, on account of the heat of the weather, and an unwholesome atmosphere, scarcely one had recovered.

I have inoculated a considerable number of persons who had been unavoidably exposed to the infection of the small-pox; in all of which, except two or three, it either prevented or superseded that disorder. In one of those cases, which happened in a girl about eight years of age, on the fourth day of the vaccine inoculation, a mild species of small-pox took place; but in another instance, where the subject was a

labouring

labouring man, advancing in years, an eruption of the small-pox appeared on the eighth day, which proved fatal. In a third instance, the patient escaped all indisposition; but at the expiration of a month from the time of inoculation of the cow-pox, had a pustule bearing every characteristic of the small-pox.

To shew how difficult it is to determine in what cases the cow-pox can supersede the small-pox, it will be sufficient to observe, that, as far as the nature of those cases would allow us to ascertain, it has been known to fail where the patient has been exposed to variolous infection only a single day; and to succeed with such as have been exposed a much greater length of time. Upon the whole, however, where it has not succeeded, it has not appeared to me to be attended with the least detriment; nor can I doubt, that what has a tendency to prevent has also a tendency to mitigate the disease, when it has already taken place in the constitution.

On the 23d of last month, Dr. Baillie and Mr. Wilson did me the favour to inform me of Mr. Malim's case*. I then mentioned to those gentlemen, that I had known similar cases; and had written a paper on the subject, which had been for the space of some weeks in the hands of the editors of this work. This is no argument against the practice of vaccine inoculation, but against a delay of that practice; and ought to be sufficient warning to every medical man, not to expose his patients to an atmosphere polluted by the small-pox, till, by virtue of that inestimable prophylactic, the cow-pox, they are rendered insusceptible of its contagion.

I am, Gentlemen,

Your most obedient servant,

*New Street, Hanover Square,* JOHN RING.

*August* 24, 1800.

* The reader will find an account of this case, communicated by Mr. Malim, in our two last Numbers, p. 105 and 208. EDIT.

Art.

Art. 3. *Notice respecting a new Pharmacopœia.* By Mr. Reece, of Chepstow, Member of the Royal College of Surgeons in London, and late domestic Surgeon and Apothecary to the General Infirmary at Hereford.

*To the Editors of the London Medical Review and Magazine.*

Gentlemen,

THE present melancholy declining state of almost every charitable public institution for the relief of the diseased poor in this kingdom, through the unparalleled pressure of the times, has induced me to offer to the physicians and surgeons of those institutions, a collection of cheap officinal and extemporaneous recipes, entitled, "The medical and chirurgical Pharmacopœia, for the Use of Hospitals, Dispensaries, &c." which, through the medium of your excellent publication, I beg leave to recommend to public notice. These medicines, if adopted, will reduce the expense of the dispensary in the immense proportion of 80 *per cent.*; and experience warrants me in asserting them to be equal in efficacy to those of the most expensive class.

Although I have more particularly published this work for the use of infirmaries, &c. I flatter myself it will be found of equal utility in private practice, more especially to those gentlemen who exercise, at very inadequate salaries, the offices of surgeons to parishes; the present expensive formulæ preventing their doing justice to the unfortunate objects labouring under the complicated evils of poverty and disease.

It was my intention to have annexed cases of the success of each particular medicine, which I relinquished from the great augmentation it would be to the size and consequent price of the book; but, I beg to assure the faculty, that they have severally undergone the test of experience with the most flattering effect. I have the honour to be, Gentlemen,

Your obedient humble servant,

*Chepstow,*
*Sept.* 18, 1800.

Richard Reece.

Art.

Art. 4. *A Case of Cynanche Trachealis, in which the Polygala Seneca was administered with Success.* By Dr. JOHN NELSON SCOTT, of the Isle of Man, Member of the Royal College of Surgeons in London, &c.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

I THINK the following communication may be of service, so far, at least, as to stimulate our brethren in making trial of a medicine which seems endowed with much activity in a disease heretofore often fatal. As such, pray let it have a place in your very valuable periodical work.

*Douglas, Isle of Man,* I am yours, &c.
*Sept. 4th,* 1800. JOHN NELSON SCOTT.

About five o'clock on Thursday morning, the 7th ult. I was called in a great hurry to a child (not quite a year and three quarters old, of a tolerably strong and not plethoric habit of body,) which I found crying and coughing at a most immoderate rate, the breathing hurried, attended with some degree of the trumpet sound, so truly pathognomonic of croup; on viewing the throat some redness was perceived.

An antimonial emetic was instantly prescribed, which operated pretty well. A blister, after the child was immersed to the neck in warm water for five minutes, was applied to the external fauces; a full dose of tinct. opii in syrup. simp. was exhibited; and for drink, a plentiful allowance of weak sack and milk-whey.

Seven o'clock, A. M. No repose or quiet, a continuance of the dry coughing, difficulty of breathing considerably augmented, the wheezing noise on inspiration much increased, countenance wears an inflamed aspect, pulse not to be distinctly counted, tongue dry and whitish, immoderate thirst, no stool and not much urine since yesterday evening, skin hot and parched.

Some calomel and jalap were given, but quickly rejected by vomiting. Eight leeches were ordered to the feet, but five only could be got to fix.

Ten o'clock, A. M. The leeches did not procure so much blood as was expected; others, therefore, would have been applied, but I could not procure them*: has had a costive stool. The blister seems to have produced but little effect, though it was prepared very strong. No relief; on the contrary, the symptoms are more violent, face suffused, respiration exceedingly laborious, accompanied with the shrill hissing noise.

Calomel and jalap repeated.

An hour after the last report, I intended to have opened the external jugular, (or a branch of the temporal artery,) but could not succeed, owing to the extreme unsteadiness of the child; even my approaching it aggravated the crying and uneasiness so much, that I feared convulsions or suffocation might ensue: this state also prevented an enema being thought of.

About six months ago I was informed that Dr. Archer, of America, had experienced much benefit from the use of the polygala seneca in cases of cynanche trachealis, and I lately observed his report of it in your useful Review. Having also the testimony of Dr. Tennant, &c. in favour of the good effects of it in other complaints, I looked upon the seneca as a probable remedy in this case. I used it in the way of decoction, but not quite so strong as Dr. Archer; (his formula is, "℞ Rad. senec. in pulv. crass. ʒß, Coque in aq. fontan. ʒviij ad ʒjv;") and directed a tea-spoonful to be given to our little patient every half hour, and to be continued,

* That useful appendage to surgery, the leech, does not long remain vigorous after its importation to the Isle of Man. The women who procure them from Wales, &c. and hire them out, complain of great mortality, and this whether the leeches have been much used or not. The air or the water (perhaps both) seems to be not congenial to their existence. It must be recollected that, like Ireland, we are exempt from venomous animals.

unless very violent and incessant vomiting should supervene. I was obliged to be absent from town for some hours, and expected the child would be dead before my return; but, to my great surprise and pleasure, it was otherwise! On my arrival, I was told that the two first doses had produced plentiful vomiting; and that ere eight tea-spoonfuls had been swallowed, the child was evidently relieved; the breathing was become less croupy, cough quite soft and not so frequent, attended with a copious and filamentous expectoration; that a fine general perspiration had broken out after the vomiting was over; and that three or four evacuations by stool and urine had taken place. The child being better, the remedy was laid aside at the end of the eighth spoonful.

Before midnight all the bad symptoms had in a manner vanished; the child had supped heartily of boiled bread and milk, and in a few days returned to its usual state of health: the perspiration continued profuse during the whole night, and the belly very open.

This case furnishes us with an example of the quick accession of truly alarming symptoms, and of the as rapid decline of them, which I am disposed to impute altogether to the American remedy. I must observe, that the blister at evening had produced but little vesication, it being difficult to keep it exactly applied, owing to the constant restlessness. As I have great faith in blisters, I was sorry I had not practised in this case what I often do with children, viz. applying a large blister to the nape of the neck, and a very narrow one round the external fauces.

We may, I am of opinion, safely conclude, that what had been done previous to the administration of the seneca would have turned out of little consequence, and the vis medicatrix naturæ seemed in truth almost asleep.

I think it requisite to state, that the subject of our present case was observed to be unwell for three days previous to the attack; insomuch, on the immediately preceding night, as to

refuse her drink: she was hoarse, had an increased secretion of the nasal mucus, and was very peevish.

The weather about this period was oppressively hot during the day, but in the evening so cold as almost to require a fire. The wind was east and north.

I beg leave to add that I had tried the seneca some few months ago, in two cases of croup; both patients recovered, (one eight years old, the other nine,) but I did not deem them fair instances of the efficacy of the seneca, as blisters had been applied and operated well, and plentiful evacuations by venæsection, leeches, and stools had been previously procured. In one (the oldest) I gave it in the form of powder, gr xij every two or three hours, in a little barley cinnamon water; in the other by decoction, by boiling ʒiij in eight ounces of water down to five—a dessert-spoonful every thirty or forty minutes.

The modus operandi of the seneca in cynanche trachealis is, in my opinion, satisfactorily explained by Dr. Archer.

Why the croup is limited in its attacks to certain periods in the life of infants and very young people, cannot perhaps be easily explained.

---

Art. 5. *Account of the Cure of a Cancer of both Breasts; one ulcerated, the other scirrhous.* Communicated by William Nisbet, M. D. Fellow of the Royal College of Surgeons in Edinburgh; and Mr. Isaac Oliphant, Member of the College of Surgeons in London.

*To the Editors of the London Medical Review and Magazine.*

Gentlemen,

Having devoted my attention of late years to a particular line of medical practice, the subject of which has been deemed one of the chief opprobria of the profession, from a conviction that this opinion is by no means well founded, and that cancer is as curable as any other species of swelling or ulcer; it

is incumbent on me, in entertaining such new sentiments, to support them by the evidence of incontrovertible facts. I shall, therefore, state the following case, one of the most melancholy that can occur, as an introduction to a number of others which shall occasionally be laid before the public through the medium of your useful miscellany.

Mrs. G. the wife of Mr. G. a coal-merchant in Tottenham Court Road, aged upwards of 40, about two years ago felt a hardness and swelling of her left breast, with all the usual symptoms of scirrhus or incipient cancer. For this complaint she first consulted Mr. Ford, who advised in that stage of the disease the application of leeches, which was made without effect.

She then put herself under the care of Mr. Cline, and continued to follow his prescriptions for the space of two months, not only with equal inefficacy, but with a gradual aggravation and increase of the disease, which became now attended with the most severe darting pains and burning heat.

In this unhappy state, anxious to obtain relief, her next resort was to the advice of Sir James Earle, who told her it was a stony cancer, and incurable; declining at the same time to prescribe any thing for her, but humanely offering, being ignorant of her real circumstances in life, to give her a letter of admission to the Middlesex Hospital.

At the request of Dr. Budd, to whom her husband had been recommended, she was next visited by Mr. Astley Cooper; who concurred in opinion with Sir James Earle, that her malady was incurable, and declined having any connexion with the case.

Thus deserted by the faculty, the patient was induced, by the over-persuasion of friends, to put herself into the hands of an ignorant empiric; under whose applications the disease advanced rapidly to the state of ulceration, and made horrid progress. In consequence of the severity of her sufferings, she was soon again obliged to solicit the assistance of a regular practitioner;

practitioner; and was accordingly visited by Mr. Andrews, surgeon, of Greek Street, along with another gentleman, whose name the patient does not know. On their concurring in the general opinion, that her case was incurable, and that nothing could be done for her relief, she at last had recourse to the advice of Mr. Oliphant, of Percy Street. Mr. Oliphant, with a proper anxiety for his patient, and a zeal, at the same time directed by humanity, which every practitioner of medicine should possess, soon after visiting her, and finding that only a palliation of her complaints could be procured, without any progress towards a cure, advised to call in Dr. Nisbet, whose attention he understood had been particularly paid to this malady. On my first visit I found the disease, as above noticed, far advanced in its ultimate stage: a short description of which will convince every practitioner of its apparently speedy and fatal termination.

An extensive foul spreading ulcer occupied the whole surface of the left breast, with thick retorted edges covered with the particular sordes peculiar to such sores, and occasionally pouring out quantities of blood from the eroded vessels. Besides the substance of the breast itself being totally diseased, the cuticular glands all round were hard and scirrhous to a considerable extent. In the arm-pit the glands were swelled to the size of a pigeon's egg, and the whole of that side was tight, contracted, and knotty, with clusters of swelled lymphatics in different parts of it. The patient could hardly use the left arm, and was totally unable to lie on that side. An erysipelatous inflammation diffused itself for a considerable way beyond the actual limits of the disease. On examining the right breast, I found a large scirrhus formed in it also, which had not yet arrived at an active state. The hectic fever was strongly formed, and the patient's health very rapidly declining.

Mr. Oliphant was of opinion, that the disease was incurable, unless a total sloughing of the breast should take place, and

in

in such a situation I could not flatter with strong hopes. Determined, however, to follow the plan which I have found in general successful, I communicated my sentiments to him; who, with that liberality which every man of real professional science possesses, acquiesced in the trial to be made, and gave every freedom in pursuing it. The treatment was accordingly begun about the beginning of July, and continued upwards of six weeks. During its progress the *curative fever* was raised to a height sufficient to subdue the morbid action in the diseased parts, and was even attended with some symptoms that required mitigation. Several of the swellings disappeared during the height of the fever. The discharge from the sore during its progress became daily more bland, whitish, and purulent. Immediately on the decline of the fever the sore assumed marks of healing, which have proceeded so rapidly, that it is now within the size of a shilling of being entirely completed. The structure of the breast, at least what remains of it, is entirely reduced to its natural state.

The swellings of the arm-pits and side are totally removed, and a complete cure in every part seems effected.

From the first applications that were made, the pain and burning heat of the disease gradually departed. No sloughing of any portion took place; but a gradual increased absorption removed the altered organization, and reduced the breast to its proper form. This shrinking and absorption were very remarkable long before any symptoms of healing appeared, and this process seemed to be the last induced by the action of the remedy.

The above facts will be sufficient to shew that the principle of cure is different from any that has yet been attempted; but at present I shall enter into no further detail of it, than to say that it consists in no secret remedy or specific suited only to a particular case, but proceeds on those general principles which apply to every form and stage of the malady. I have been particular in stating the medical advice this patient received, that the gentlemen

tlemen mentioned may themselves make the necessary inquiries concerning the issue of it.

I am, Gentlemen,

*Pickering Place, St. James's,* Your humble servant,

*Sept.* 21, 1800. WILLIAM NISBET.

---

Art. 6. *Observations on the Case of Mr. Orstein, who was trepanned for an Empyema under the Sternum.* By Mr. BLAIR, Surgeon of the Lock Hospital and Asylum, and of the Finsbury Dispensary, &c.

*To the Editors of the London Medical Review and Magazine.*

GENTLEMEN,

THE operation of trepanning the sternum, in order to evacuate matter confined within the duplicature of the anterior mediastinum, has very rarely been performed with success: the publication of an instance of this kind, in the Fifteenth Number of your widely-diffused Magazine, must therefore have excited the general attention of surgeons, and may have disposed them to receive any further information respecting the subject of that case.

Having been accidentally in company with a foreigner some weeks ago, he told me, as a remarkable fact, that an acquaintance of his had been successfully trepanned upon the sternum by Professor VOGEL, of Altorf. After making a few inquiries concerning the patient, I learnt that he was the same person whom you had lately noticed in the Medical Magazine, and that he at present resided in London. I was prompted by curiosity to request an interview with the patient, (Mr. Orstein,) and have since been gratified with a visit from him. He informs me that he enjoys a perfect state of health, and suffers no other inconvenience from the operation than a sense of oppression at his chest when he is exposed to a current of air. The aperture which was made in the bone is filled

up

up by osseous or cartilaginous matter, and is as firm as any other part of the sternum.

The late Professor SEYBOLD, Mr. Orstein says, performed this operation at Wirtzburgh on eight or nine different subjects; but, unhappily, they every one died. It therefore seems as if the event of Dr. Vogel's experiment was unusually fortunate. I know, indeed, that some writers have pronounced this operation to be not very hazardous; and it is possible that the danger arises less from the practice itself, than from the circumstances of the disease in which it has been recommended. Dr. Friend, the celebrated historian, relates, on the credit of an experienced surgeon, "that abscesses of the mediastinum particularly happen in venereal distempers, and that in such cases he (the surgeon) had frequently used the trepan with great success." But if this case occurs so frequently in the venereal disease, it is very strange that among the great number of patients with lues venerea who annually come under my care, not one should have been ever suspected to suffer from an empyema of the mediastinum. The symptoms are such that, if they had often occurred, I think the nature of the disorder might now and then have been detected.

Galen mentions a case of diseased sternum, in which he removed the carious portion of bone, and the patient recovered. A similar case is related in Riverius's works. Paré thought the proposal of trepanning this part was impracticable and ridiculous. Barbette and Sotingen recommend the operation. Two instances are also cited in which it was done successfully, by Purmannus. Several English authors have spoken against it. Mr. Benjamin Bell, however, recommends the perforation of the sternum, when pus or serum is collected under it; but his remarks on this subject are so superficial, that he seems never to have witnessed the operation himself. Among the different writers I have consulted, very little original information is to be obtained: but a case of empyema is recorded by Van Swieten, in his Commentaries

on

on Boerhaave's Aphorisms, § 895, which deserves particular attention.

I remain, Gentlemen,

*August* 25, 1800. Your humble servant,

*Great Russel Street, Bloomsbury.* WILLIAM BLAIR.

---

Art. 7. Mr. BLAIR's *Reflections on caustic and metallic Bougies.*

(Concluded from page 212.)

AS the name of Mr. Benjamin Bell may be supposed to have considerable weight among surgical students, I beg leave to state his opinion, and to subjoin a few cursory remarks, in order to remove some apparent objections against the caustic. "Where strictures are slight," Mr. Bell observes, "a degree of force may be used with bougies, sufficient for removing them. Whenever this can be done, none will doubt the propriety of preferring them to caustic." The justice of this opinion will be readily admitted: but, he immediately adds, "when strictures occupy such an extent in the urethra as to render our attempts with bougies unsuccessful, there will be little or no room to hope that caustic will answer better. In all such circumstances, it appears to me preferable to let the disease take its usual course. The worst that can probably happen (though he afterwards mentions still more distressful consequences) is the formation of sinusses behind the strictures, and the discharge of urine from the openings which these produce." Now, what is Mr. Bell's remedy in such deplorable cases? He tells us, "in such circumstances *nothing* will answer if the diseased parts be not freely laid open. A staff being introduced to the depth of the stricture, and a small probe passed in at one of the openings, and carried to the opposite side of the stricture, the intermediate space should be laid open by an incision in the direction of the urethra. *I operation is so highly important, is attended with so much*

*and such uncertain success, that no practitioner of experience will advise it while the urine is not almost entirely obstructed.*"

The only objections he urges against the caustic are, that "*it must prove hazardous* from two circumstances; our not being able, even with all the pains we can take, to apply it to the stricture alone, without injuring the contiguous parts of the urethra; and the risk which there must always be of some small portion of the caustic breaking off, and resting in the passage." No one can suspect that I wish to recommend the indiscriminate and careless application of caustic bougies: I only maintain, that there have been numerous cases in which the mild plan of treatment has failed, and this has completely succeeded. That laying open the urinary canal might also have succeeded in many of these strictures, is highly probable. My own experience has proved the utility of the incision; but it has also proved that so harsh a remedy may be dispensed with, and the caustic employed advantageously, in some cases apparently desperate. The first objection of Mr. Bell can have but little weight with surgeons who have applied the caustic properly embedded in a large bougie, as I have directed: and his second objection is answered by a plain matter of fact; namely, that I have never met with the accident he fears, of the caustic breaking off and lodging in the urethra, although I have applied it about a hundred and fifty times. The mischief, therefore, to be justly apprehended from this treatment must be comparatively small; and the benefits arising from it, when properly managed, are too great to be hastily decried.

Of the various kinds of bougies employed where caustic remedies are not advisable, I have found none so excellent as those formed of catgut thinly covered with the elastic gum. Having made use of several specimens of those elastic instruments, fabricated in France, Sweden, and England, I find a considerable diversity in their qualities: but, as different persons in London are endeavouring to bring this manufacture to a state of perfection, I decline offering any premature re-

marks

marks on their comparative merits. The only instruments now extolled as equal to those of elastic gum, are Mr. Smyth's "*flexible metallic bougies*," concerning which I shall here add a few words.

The invention of metallic sounds and catheters (improperly called bougies) is nearly as old as the use of caustics, which I find to have been above a hundred and fifty years ago. The materials they were usually made of, consisted of gold, silver, or lead: but when good plaister bougies were introduced to general notice, the old apparatus, which was hazardous and unmanageable, soon became obsolete. Some surgeons, indeed, continued to use these metallic rods or probes till very lately; for I have been consulted in the case of a gentleman with a stricture, who was very near losing his penis from the injury he sustained in an attempt made by a celebrated surgeon to pass one of them down the urethra.

Mr. Smyth's probes are offered to the public as superior to every other: the inventor tells us he makes "two kinds of bougies. The first of these are solid, but at the same time they are as flexible as those made of common plaister, and are possessed of strength and firmness enough to overcome any obstruction that ought to yield to pressure. They are also of so smooth a surface that they may be introduced with ease, and so durable, that one case, containing twelve bougies of different sizes, with a little care, will last a surgeon in full practice for many years. The second are hollow, and of sizes similar to the solid ones, furnished with a stilet or wire of the same metal, for cases where it is judged proper to let them remain in the bladder; but in strictures requiring greater force than can be exerted with these bougies, as they are considerably softer than the silver catheter, a temporary brass or iron wire will give them sufficient strength for their introduction. These bougies, both solid and hollow, may be continued in the passage any length of time without danger of breaking, or giving the least pain. They cannot be affected

by the warmth of the parts to which they are applied, nor acted upon by the stricture, as frequently happens, particularly the spasmodic contraction of the urethra, when the plaister bougie or elastic gum catheter is used. They may be had of any size or degree of flexibility, and when tarnished they may be re-polished with a piece of shamoy leather and a little whiting. Their action," he says, "is purely mechanical."

When Mr. Smyth had publicly advertised his "discovery," and stated that it was "allowed by some of the most eminent practitioners to be a great improvement in this branch of the healing art," I determined to ascertain the full extent of its merits; and accordingly, made trial of the different bougies and catheters. But my first endeavours to pass those instruments did not succeed, even in cases where the elastic-gum and plaister-bougies might be easily introduced; so that I am convinced a much greater degree of dexterity is requisite to manage the former than the latter. The flexibility of the metal (although greatly inferior to the pliable quality of the bougies in common use) I found to be a real disadvantage, instead of a convenience: for, as it had no tendency to recoil after it had been once bent, the metallic bougie, in passing along to the bladder, took a further degree of curvature than was correspondent to the natural form of the urethra; and when I employed the more solid kind, which did not yield with so much facility, I could perceive no difference whatever in its effect from that of the silver catheter or steel sound. But the elastic-gum and plaister-bougies possess a very essential quality which can never be imparted to a metallic instrument: they readily accommodate themselves to the various inequalities and tortuosities we meet with in diseased urethræ; and are, nevertheless, sufficiently firm to dilate the contracted parts of the canal. Besides, the tender state of a morbid urethra will seldom endure the incompressible hardness of a metallic body. I may add, that the smallest of these metallic bougies, which are the most flexible of any, have commonly (in

my hands at least) scratched and punctured the surface of the urethra as soon as they were introduced: to prevent this mischievous effect, I passed them afterwards through a metallic tube as low down as I could; but as soon as they were a little protruded, the patients again complained of my pricking them, so that I was obliged to desist.

Upon the whole, therefore, I am constrained to acknowledge, after a variety of trials, that the instruments advertised by Mr. Smyth appear to possess none of the indispensable properties we require for the treatment of strictures, in so delicate a part as the urethra. I say this with great reluctance; as a different opinion has been inadvertently given by some respectable men, and because the discoverer is entitled to our thanks for the trouble he has been at to perfect his invention.

*Great Russel Street,*
*Bloomsbury.*

I am, Gentlemen, &c. &c.
WILLIAM BLAIR.

---

Art. 8. *A short Account of several Societies in London, established for the Advancement and Diffusion of medical Knowledge.*

NOTHING has contributed more to the advancement and diffusion of useful science than the institution of literary societies: they tend to excite a generous ardour in liberal minds, and even to convert envy itself into a spirit of emulation. The progress of medical and surgical knowledge has for the most part kept pace with the disposition which existed in professional men to concentre their observations and exertions. In this view, therefore, the great advantage which is to be derived from the mutual communication of our thoughts and experience, must be sufficiently evident.

We shall at present confine our remarks to those institutions that exist in this metropolis, and which are open for the admission of all respectable men of science, whose views and habits coincide with the plan of each particular society. Besides

sides these, there are other medical associations, on a more confined scale, whose members are limited to a select and small number.

*The Medical Society of London.*

This society was instituted in the year 1773. Its immediate design is to give practitioners in medicine frequent opportunities of meeting together, and conferring with each other concerning any difficult or uncommon cases which may have occurred; or communicating any new discoveries in medicine which have been made, either at home or abroad. Papers which tend to the advancement of medical science are received by the society; and such as may be deemed worthy of publication are carefully preserved, until sufficient matter for a volume is collected. We have given a copious analysis of the Fifth and last Volume published by this respectable body. (See our Eighth, Ninth, and Tenth Numbers.)

In order to excite practitioners to bring those talents to light which would otherwise lie buried and useless to the community, the society holds forth honorary rewards to those who shall improve the medical art: and although this was not before attempted in these kingdoms, their example appears not unworthy of imitation. Our readers will find an account of the last prize questions of this society in the Third Number of our work, for May 1799.

The Medical Society is held at a spacious freehold house in Bolt Court, Fleet Street, for which the members are indebted to Dr. Lettsom, its founder. At this house there exists the best collection of ancient and modern authors to which medical men in London have easy access. Many estimable presents from time to time have been made by different members; but what will render this collection of almost incalculable utility, is the accession it has recently obtained of above eight thousand volumes from Dr. James Sims's vast library of choice medical publications. The value of such a repository, it is hoped, will be duly considered by physicians,

surgeons,

surgeons, and apothecaries, in London, for whose benefit it is constantly open.

Those who wish to become acquainted with the different branches of this establishment, the denominations of its members, and their respective qualifications, must refer to the printed "Statutes of the Medical Society." The first general meeting of its members, for the next winter season, will be on Monday evening, October the 6th, at eight o'clock.

*The Lyceum Medicum Londinense.*

This institution was first established, under the patronage of Dr. George Fordyce and the late Mr. John Hunter, in January 1785. Its meetings are now held at the Theatre of Anatomy in Great Windmill Street, Piccadilly. The session opens on the second Wednesday in October, and continues to meet on the same day of the week, at eight o'clock, till the beginning of May, when it closes for the summer.

This society not only allots a part of the evening for medical news and conversation (like the London Medical Society), but also enters into a formal discussion or debate on some paper previously brought forward by a certain class of its members in rotation. A library is here likewise established for the use of the members: and a gold medal is adjudged to the best writer on a given subject, connected with medicine.

Their last prize question was stated in our Thirteenth Number, and the regulations for the prize may be seen in our publication for June 1799.

*Physical Society at Guy's Hospital.*

The example of Dr. Fordyce and Mr. Hunter, who patronized the Lyceum Medicum Londinense, was soon followed by other eminent practitioners; in consequence of which, societies were formed at different medical theatres in London, for the purpose of discussing professional subjects, and communicating the experience of individuals. The Physical Society at Guy's Hospital, which meets on Saturday evenings at seven o'clock, from the first week in October till the last

in

in May, is one of the most flourishing of these. The general plan resembles that of the Lyceum Medicum: prizes are annually offered to the writers of the two best dissertations on some physical subjects; and there exists a library for the use of its members. It is generally believed that the *Medical Records and Researches*, which we reviewed in our Number for March 1799, were selected from the papers of this association.

The prize questions of this Society, for the year 1800, are,—1. "*How do the vegetable and mineral poisons act upon the body? and, What are the means of preventing their deleterious effects?*—2. *Are there any substances in nature which act directly as sedatives on the human body?*"—The essays in reply to these questions must be delivered to the librarian before the first Saturday in December 1800. The regulations concerning the prize subject were given in our Number for March 1799.

We understand that a similar society has been instituted at *St. Bartholomew*'s, and at one or two other hospitals in this metropolis.

---

Art. 9. *Answers to Readers and Correspondents.*

MR. HARRUP's obliging Communication is received.

Our literary intelligence has been greatly abridged this month; and the solutions we have prepared to various queries of our correspondents are unavoidably postponed, for want of room: but, to remedy the inconvenience arising from occasional omissions in our Review and Magazine, it has been suggested that an EXTRA-NUMBER might be published. This proposal has been considered, and will be cheerfully acceded to; as it cannot be unacceptable to our readers, and will enable us to notice many medical books which have been inadvertently passed by.

---

Prof. OSIANDER's Representation of a diseased Testicle is to face page 301.

THE

# LONDON MEDICAL REVIEW

AND

# MAGAZINE.

VOL. IV. N° XX. OCTOBER MDCCC.

## ANALYSIS OF BOOKS.

ART. I. *Tableau de l'Ecole de Botanique du Jardin des Plantes de Paris; ou Catalogue général des Plantes, qui y sont cultivées et rangées par Classes, Ordres, Genres, ou Espèces, d'apres les Principes de la Méthode naturelle de* A. L. JUSSIEU, *suivi d'une Table alphabetique des Noms vulgaires des Plantes le plus fréquemment employées en Médecine, dans les Arts, la Décoration des Jardins, &c. avec les Noms des Genres et des Espèces auxquelles elles se rapportent.* Par un BOTANISTE. Octavo. 100 pages. Chez FUCHS, Paris. 1800.

IN an address to the reader, the editor of this catalogue declares he has not any connexion with the authors of the work which has so injuriously treated M. Desfontaines, and of which the latter has so justly complained in a letter inserted in the Journals. His intention in publishing this catalogue has been to comply with the desire expressed to him by a

number of his pupils, and to supply them with all the advantages he has reaped from it himself. The title fully explains the subject: he publishes it anonymously; but he might have dispensed with calling himself a *botanist*; for at the bottom of a picture, or on a grate, there is certainly no occasion to say they are done by a painter or a smith. However, this does not injure the work, which affords a commodious and useful nomenclature to those who visit the garden. [*Mag. Encycl.*

---

## Art. II. *Philosophical Transactions for* 1800, *Part I.*

(Concluded from page 238.)

THE sixth article contains an *Account of a Peculiarity in the Distribution of the Arteries sent to the Limbs of slow-moving Animals; together with some other similar Facts.* In a Letter from Mr. Anthony Carlisle, Surgeon, to John Symmons, Esq. F. R. S.

Mr. Carlisle injected the arteries of the macauco; *i. e.* the *lemur tardigradus* of Linnæus, and found a very unusual deviation from the ordinary arrangement of this class of blood-vessels in other animals. This peculiarity was observed in the axillary and iliac arteries. These vessels, at their entrance into the upper and lower limbs, are suddenly divided into a number of equal-sized cylinders, which occasionally anastomose with each other. They are exclusively distributed on the muscles; whilst the arteries sent to all the parts of the body, excepting the limbs, divide in the usual arborescent form; and, even those arteries of the limbs which are employed upon substances not muscular, branch off like the common blood-vessels. He counted twenty-three of these cylinders, parallel to each other, about the middle of the upper arm; and seventeen in the inguinal fasciculus.

The author having since prosecuted his examination of the arteries in some other animals of similar habits and characters, found

found so great an affinity as to afford hopes that the result may serve to elucidate the phenomena of muscular motion.

Mr. Carlisle counted forty-two separate cylinders upon the superficies of the brachial fasciculus, in the great American sloth, or *bradypus tridactylus*; and he supposes above twenty more cylinders were concealed in the centre. He observed only thirty-four branches in the middle of the thigh, and the first series of ramifications were larger than the rest. The *lemur loris* was next dissected, and found to resemble the former in its arterial system.

In all the quadrupeds before mentioned, the other blood-vessels, as well as the nerves, presented the common appearances. The size of the heads, and the interior capacity of the skulls, both in the *bradypus tridactylus* and the *lemur tardigradus*, seemed smaller in proportion than is usual among animals, so that the quantity of brain must be less than ordinary.

The author thinks the effect of this peculiar disposition of the arteries will be that of retarding the velocity of the blood passing into the muscles of the limbs. He says, "it may be difficult to determine, whether the slow movement of the blood sent to these muscles be a subordinate convenience to other primary causes of their slow contraction, or whether it be of itself the immediate and principal cause. The facts at present ascertained, relative to muscular motion, do not authorize me to treat decidedly of the share which the vascular system holds in the operation of muscular contraction. Certain it is, that a larger proportion of arteries is sent to the muscles of quadrupeds than to the ordinary substances; and the extreme redness of these organs shews that their capillaries are of large diameter. A greater degree of redness is also observable in those muscles (of the same animal) which are most frequently called into action. The habits of life among the tardigrade animals give occasion for the long-continued contraction of some muscles in their limbs; these creatures are

represented clinging to the boughs of trees, and remaining thus, without locomotion, for several hours. The powers which require so long a time to determine the contraction of a series of muscles are probably no less slow in restoring the parts to their former condition; or, if the restoration is to be effected by antagonist muscles under the same circumstances, then, the flexion and extension of every part of the limbs will correspond, as to time.

"I have not met with any arrangement of blood-vessels analogous to those described, except in the carotid artery of the lion. May not this peculiarity be subservient to the long-continued exertion of the muscles of his jaws, whilst holding a powerful animal, such as a horse or buffalo, and thus enable him to retain his prey, until it is wearied out by ineffectual struggles? I believe also, that those animals which chew the cud, have a plexus of arteries in the neck, analogous to the *rete mirabile*: but this fact has not yet been verified in all the ruminating quadrupeds; and the effect of these arrangements seems rather to operate as sluices to the arteries of the masticating muscles, than directly as the means of retarding the velocity of their fluids. It is however necessary to examine these subjects more accurately."

The author having instituted a series of experiments and inquiries with the view of elucidating this subject, we are in hopes he will lay the result of his labour before the public on some future occasion.

The next paper, in which medical readers will be interested, contains *Observations on the Effects which take place from the Destruction of the Membrana Tympani of the Ear.* By Mr. Astley Cooper. In a Letter to Everard Home, Esq. F. R. S. by whom some remarks are added.

The trials hitherto made on different animals to ascertain the effect of perforating the membrana tympani, Mr. Cooper says, have been unsatisfactory. He made the human ear the subject of his observations, and has found that this membrane

brane may be lost without much prejudice to the organ of hearing. This fact, however, had been proved long ago.

He relates the following case of Mr. P——, a medical student at St. Thomas's Hospital, who applied to him in 1797: "He had been subject from his infancy to pains in the head, and was attacked, at the age of ten years, with an inflammation and suppuration in the left ear, which continued discharging matter for several weeks: in the space of about twelve months after the first attack, symptoms of a similar kind took place in the right ear, from which also matter issued for a considerable time. The discharge in each instance was thin, and extremely offensive to the smell; and, in the matter, bones or pieces of bones were observable. The immediate consequence of these attacks was a total deafness, which continued for three months; the hearing then began to return, and, in about ten months from the last attack, was restored to the state in which it at present remains.

"Having thus described the disease and its symptoms, he gave me the following satisfactory proof of each membrana tympani being imperfect. Having filled his mouth with air, he closed the nostrils, and contracted his cheeks: the air, thus compressed, was heard to rush through the meatus auditorius, with a whistling noise, and the hair hanging from the temples became agitated by the current of air which issued from the ear. To determine this with greater precision, I called for a lighted candle, which was applied in turn to each ear, and the flame was agitated in a similar manner. Struck with the novelty of these phenomena, I wished to have many witnesses of them, and therefore requested him, at the conclusion of the lecture upon the organ of hearing, to exhibit them to his fellow-students, with which request he was so obliging as to comply.

"It was evident from these experiments, that the membrana tympani of each ear was incomplete, and that the air issued from the mouth, by the Eustachian tube, through an

opening in that membrane, and escaped by the external meatus.

" To determine the degree in which the membrana tympani had been injured, I passed a probe into each ear, and found that the membrane on the left side was entirely destroyed; since the probe struck against the petrous portion of the temporal bone, at the interior part of the tympanum, not by passing through a small opening; for, after an attentive examination, the space usually occupied by the membrana tympani was found to be an aperture, without one trace of membrane remaining.

" On the right side also, a probe could be passed into the cavity of the tympanum; but here, by conducting it along the sides of the meatus, some remains of the circumference of the membrane could be discovered, with a circular opening in its centre, about the fourth of an inch in diameter.

" From such a destruction of this membrane, partial indeed in one ear, but complete in the other, it might be expected that a total annihilation of the powers of the organ would have followed: but the deafness was inconsiderable. This gentleman, if his attention were exerted, was capable, when in company, of hearing whatever was said in the usual tone of conversation; and it is worthy of remark, that he could hear with the left ear better than with the right, though in the left no traces of the membrana tympani could be perceived.

" When attending the anatomical lectures also, he could hear, even at the most distant part of the theatre, every word that was delivered; though, to avoid the regular and constant exertion which it required, he preferred placing himself near the lecturer.

" I found, however, that when a note was struck upon the piano forte, he could hear it only at two thirds of the distance at which I could hear it myself; and he informed me, that in a voyage he had made to the East Indies, while others, when ships were hailed at sea, could catch words with accu-

racy,

racy, his organ of hearing received only an indistinct impression. But the most extraordinary circumstance in Mr. P—'s case is, that the ear was nicely susceptible of musical tones; *for he played well on the flute, and had frequently borne a part in a concert.* I speak this, not from his own authority only, but also from that of his father, who is an excellent judge of music, and plays well on the violin: he told me, that his son, besides playing on the flute, sung with much taste, and perfectly in tune.

"The slight degree of deafness of which Mr. P— complained, was always greatly increased by his catching cold: an effect which seems to have arisen from the meatus being closed by an accumulation of the natural secretion of the ear; for it frequently happened to him after he had been some time deaf from cold, that a large piece of hardened wax, during a fit of coughing, was forced from the ear, by the air rushing from the mouth through the Eustachian tube, and his hearing was instantly restored.

"From bathing likewise he suffered considerable inconvenience, unless his ears were guarded against the water, by cotton being previously forced into the meatus. When this precaution was neglected, the water, as he plunged in, by rushing into the interior parts of the ears, occasioned violent pain, and brought on a deafness, which continued until the cause was removed, that is, until the water was discharged: but he had acquired the habit of removing it, by forcing air from the mouth through the ear.

"In a healthy ear, when the meatus auditorius is stopped by the finger, or is otherwise closed, a noise similar to that of a distant roaring of the sea is produced: this arises from the air in the meatus being compressed upon the membrana tympani. In the case here described, no sensation was produced; for, in Mr. P—'s ear, the air, meeting with no impediment, could suffer no compression; since it found a passage through the open membrane to the mouth, by means of the Eustachian tube.

"Mr.

" Mr. P— was liable to the sensation commonly called the *teeth being on edge*, in the same degree as it exists in others; and it was produced by similar acute sounds, as by the filing of a saw, the rubbing of silk, &c. Its occurring to him seems to disprove the idea which has been entertained of its cause; for it has been thought that the close connexion of the nerve called the corda tympani with the membrana tympani exposed it to be affected by the motions of the malleus; and that, as it passes to nerves connected with the teeth, they would suffer from the vibratory state of the nerve, produced by the agitations of the membrane. But, in this case, as the membrane was entirely destroyed on that side on which the sensation was produced, some other explanation must be resorted to; and I see no reason why this effect should not be referred to that part of the auditory nerve which lines the labyrinth of the ear, which, being impressed by acute and disagreeable sounds, would convey the impression to the portio dura of the same nerve, and to the teeth with which that nerve is connected.

" The external ear, though two distinct muscles are inserted into it, is capable, in its natural state, of little motion; however, when an organ becomes imperfect, every agent which can be employed to increase its powers is called into action; and, in the case here described, the external ear had acquired a distinct motion upward and backward, which was observable whenever Mr. P— listened to any thing which he did not distinctly hear. This power over the muscles was so great, that, when desired to raise the ear, or to draw it backwards, he was capable of moving it in either direction."

The author informs us that another gentleman, Mr. A—, applied to him " under a similar complaint (but in one ear only) proceeding from suppuration, and producing the same effects. This gentleman has the same power of forcing air through the imperfect ear; suffers equally from bathing, if the meatus auditorius be unprotected; and feels, even from exposure to a stream of cold air, very considerable pain. The

only

only difference I could observe was, that in Mr. A—'s case, the defect of hearing in the diseased organ was somewhat greater than in the former; for though, when his sound ear was closed, he could hear what was said in a common tone of voice, yet he could not distinguish the notes of a piano forte at the same distance: a difference which might have in part arisen from the confused noise which is always produced by closing the sound ear; or because, as he heard well on one side, the imperfect ear had remained unemployed, and consequently had been enfeebled by disuse.

"From these observations it seems evidently to follow, that the loss of the membrana tympani in both ears, far from producing total deafness, occasions only a slight diminution of the powers of hearing.

"Anatomists who have destroyed this membrane in dogs, have asserted, that at first the effect on the sense of hearing was trivial; but that, after the lapse of a few months, a total deafness ensued. Baron Haller also has said, that if the membrane of the tympanum be broken, the person becomes at first hard of hearing, and afterwards perfectly deaf. But, in these instances, the destruction must have extended further than the membrana tympani; and the labyrinth must have suffered from the removal of the stapes, and from the consequent discharge of water contained in the cavities of the internal ear; for it has been very constantly observed, that when all the small bones of the ear have been discharged, a total deafness has ensued.

"It is probable, that in instances in which the membrana tympani is destroyed, the functions of this membrane have been carried on by the membranes of the fenestra ovalis and fenestra rotunda: for, as they are placed over the water of the labyrinth, they will, when agitated by the impressions of sound, convey their vibrations to that fluid in a similar manner, though in somewhat an inferior degree, to those which are conveyed by means of the membrana tympani and the

small bones which are attached to it: and thus, in the organ of hearing, each part is admirably adapted, not only to the purpose for which it is designed, but also as a provision against accident or disease; so that, whenever any particular part is destroyed, another is substituted for it, and the organ, from this deprivation, suffers but little injury in its functions.

"It seems that the principal use of the membrana tympani is, to modify the impressions of sound, and to proportion them to the powers and expectation of the organ. Mr. P— had lost this power for a considerable period after the destruction of the membrane; but, in process of time, as the external ear acquired the additional motions I have described, sounds were rendered stronger or weaker by them. When, therefore, he was addressed in a whisper, the ear was seen immediately to move; but, when the tone of voice was louder, it then remained altogether motionless."

Mr. Home makes the following observations on this paper of Mr. Cooper:

"It is there stated, that any vibrations communicated directly to the bones of the skull, are as accurately impressed upon the organ, as through the medium of the membrana tympani. The office of that membrane is therefore to afford an extended surface, capable of receiving impressions from the external air, and of communicating them to the small bones of the ear; which a membrane would be incapable of doing, unless it had a power of varying its tension, to adapt it to different vibrations.

"In the above cases, in which this membrane, the malleus, and the incus, had been destroyed, it would appear that the stapes was acted upon by the air received into the cavity of the tympanum, and communicated the impressions immediately to the internal organ. This not happening for some months after the membrane was destroyed, probably arose from the inflammation of the tympanum confining the stapes, and rendering its vibrations imperfect.

"That

"That sounds can be communicated with accuracy by the bones of the skull, to the internal organ, when received from solid or liquid substances, has long been well understood.

"That the membrana tympani is incapable of perfectly answering this purpose, when sounds are propagated through air, has been a generally received opinion; to refute which was the object of my former paper. That, in cases in which the membrana tympani has been destroyed, the air is capable of acting with sufficient force upon the stapes to communicate vibrations to it, and to produce on the internal organ the necessary effect for perfect hearing, is completely ascertained by Mr. Cooper's observations."

The tenth article in this volume contains an *Account of a Series of Experiments, undertaken with the View of decomposing the muriatic Acid.* By Mr. William Henry. Communicated by the Right Hon. Sir Joseph Banks, Bart. P. R. S.

In the series of experiments which the author made on the muriatic acid gas, he employed the electric fluid as an agent much preferable to artificial heat. He says "this mode of operating enables us to confine accurately the gases submitted to experiment; the phenomena that occur during the process may be distinctly observed; and the comparison of the products, with the original gases, may be instituted with great exactness. The action of the electric fluid itself, as a decomponent, is extremely powerful; for it is capable of separating from each other, the constituent parts of water, of the nitric and sulphuric acids, of the volatile alkali, of nitrous gas, and of several other bodies, whose components are strongly united. I began, therefore, with examining attentively the effects of the electric fluid on the muriatic acid gas, without admixture."

After a variety of well-conducted experiments it appeared that no progress had been made towards a decomposition of the muriatic acid; he therefore resolved to attempt its ana-

lysis, in a similar manner, with the aid of combustible gases. Eighteen experiments afforded the following conclusions:

" 1. The muriatic acid gas, in the driest state in which it can be procured, still contains a portion of water. From a calculation founded on the experiments described in the first section, the grounds of which are too obvious to require being stated, it follows, that one hundred cubical inches of muriatic gas, after exposure to muriate of lime, still hold in combination 1.4 grain of water.

" 2. When electrical shocks are passed through this gas, the watery portion is decomposed. The hydrogen of the water, uniting with the electric matter, constitutes hydrogenous gas, and the oxygen unites with the muriatic acid; which last, acting on the mercury, composes muriate of mercury.

" 3. The electric fluid serves as an intermedium, in combining oxygen with muriatic fluid.

" 4. The really acid portion of muriatic gas does not sustain any decomposition by the action of electricity.

" 5. When electric shocks are passed through a mixture of carbonated hydrogen and muriatic acid gases, the water held in solution by these gases is decomposed by the carbon of the compound inflammable gas; and carbonic acid and hydrogenous gases are the result.

" 6. When all the water of the two gases has been decomposed, no effect ensues from continuing the electrization; or, if the water of each gas has been previously destroyed, by electrifying them separately, no further effect ensues from electrifying them conjointly.

" 7. Since therefore carbon, though placed under the most favourable circumstances for abstracting from the muriatic acid, and combining with its oxygen, evinces no such tendency, it may be inferred, that if the muriatic acid be an oxygenated substance, its radical has a stronger affinity for oxygen than charcoal possesses.

" Though

" Though the first impressions excited in my mind by the total failure of the above experiments, in accomplishing one of the greatest objects of modern chemistry, have induced me for some time to withhold them from the society, I am satisfied by reflection, that this communication is not without expediency. The means employed in attempting the analysis of the muriatic acid, were such as, after mature deliberation, appeared to me most to promise success; and the experiments were attended with a degree of labour, which can only be estimated by those who have been engaged in similar pursuits; not one third of those which were really made having been described in the foregoing account of them. It may spare, therefore, to others, a fruitless application of time and trouble, to be made acquainted with what I have done; and the collateral facts which have presented themselves in the inquiry are perhaps not without curiosity or value.

" From the result of these experiments, I apprehend, all hope must be relinquished of effecting the decomposition of the muriatic acid, in the way of single elective affinity. They furnish also a strong probability, that the basis of the muriatic acid is some unknown body; for no combustible substance with which we are acquainted, can retain oxygen, when submitted, in contact with charcoal, to the action of electricity, or of a high temperature. The analysis of this acid must, in future, be attempted with the aid of complicated affinities. Thus, in the masterly experiment of Mr. Tennant, phosphorus, which attracts oxygen less strongly than charcoal, by the intermediation of lime decomposes the carbonic acid. Yet, led by the analogy of this fact, its discoverer found that a similar artifice did not succeed in decomposing the muriatic acid. ' As vital air,' he observes, ' is attracted by a compound of ' phosphorus and calcareous earth, more powerfully than by ' charcoal, I was desirous of trying their efficacy upon those ' acids which may from analogy be supposed to contain vital ' air, but which are not effected by the application of char-

' coal,

'coal. With this intention, I made phosphorus pass through 'a compound of marine acid and calcareous earth, and also 'of fluor acid and calcareous earth, but without producing in 'either of them any alteration. Since the strong attraction 'which these acids have for calcareous earth tends to prevent 'their decomposition, it might be thought, that in this man-'ner they were not more disposed to part with vital air than 'by the attraction of charcoal: but this, however, does not 'appear to be the fact. I have found, that phosphorus can-'not be obtained by passing marine acid through a compound 'of bones and charcoal when red-hot. The attraction, there-'fore, of phosphorus and lime for vital air, exceeds the at-'traction of charcoal, by a greater force than that arising from 'the attraction of marine acid for lime.'

"By means similar to those employed in attempting the analysis of the muriatic acid, I tried to effect that of the fluoric acid. When electrified alone, in a glass tube coated internally with wax, it sustained a diminution of bulk, and there remained a portion of hydrogenous gas. But, neither in this mode, nor by submitting it, mixed with carbonated hydrogenous gas, to the action of electricity, was any progress made towards its analysis. These experiments, however, render it probable, that the fluoric acid, like the muriatic, is susceptible of still farther oxygenation, in which state it becomes capable of acting on mercury. The carbonic acid, on the contrary, appears not to admit of different degrees of oxygenation. When the electric shock has been repeatedly passed through a portion of this acid gas, its bulk is enlarged, and a permanent gas is produced, which is evidently a mixture of oxygenous and hydrogenous gases; for, when an electrical spark is passed through the gas that remains after the absorption of the carbonic acid by caustic alkali, it immediately explodes. These results even take place on electrifying carbonic acid from marble, previously calcined in a low red heat, to expel its water, and then distilled in an earthen retort.



"Messrs.

"Messieurs Landriani and Van Marum (Annales de Chimie, tom. ii. p. 270.) obtained only hydrogenous gas, by electrifying the carbonic acid gas. But the conductor of their apparatus was an iron one; which metal would combine with the oxygen of the water, and prevent it from appearing in a gaseous state. In my experiments, the conductors were of platina."

---

ART. II. *A practical Treatise on the different Fevers of the West Indies, and their diagnostic Symptoms.* By WM. FOWLE, M.D. F.R.P.S. ED. Licentiate of the London Royal College of Physicians, and Physician to the Forces. Octavo. 93 pages. SYMONDS, London. 1800. Price 2*s.* 6*d.*

THE author, who has been employed as physician to the British forces in the West Indies, had frequent opportunities of treating the diseases most usual in that climate. He observed with concern the diversity of opinions that prevailed, as to the nature and origin, as well as to the mode of treating the yellow fever, of late the most frequent and fatal disease among them. Having no certain clue to guide him to the path it might be most advantageous to follow, he determined to be attentive in watching the symptoms, and to have recourse to such remedies, as from their analogy to the diseases with which he was more familiar seemed to be indicated. The yellowness of the skin, from which the fever takes its name, he soon found was by no means peculiar to one particular disease; but that persons attacked with fever, of almost any kind, became generally, in the course of it, of that colour. Hence he thinks it not unlikely, that the disease has frequently been mistaken, and the fever that yielded to mercurial frictions, under the care of one physician, to jalap and calomel under another, and to bark and cordials with a third, though all designated by the name of yellow fever, were in fact different diseases. The

The author begins with a description of the Leeward Islands, and an account of the soil, produce, and climate, of which he gives a more favourable picture than we have been accustomed to receive. "The towns," he says, "are generally built on the sandy ground, as by these means they are rendered more dry, and consequently more healthy; where there is also a gentle rise from the sea, there is the like advantage: this is the case of St. Pierre's, in Martinique, which is also furnished with water in almost every street, affording a most agreeable and refreshing coolness; and I think that this town is nearly as healthy as any one of its size and population, even in Europe. Some of the towns, however, such as Castries in the Carenage, at the foot of Morne Fortuné, in the island of St. Lucia, and Fort Royal in Martinique, and many others, are situated on more swampy grounds in the neighbourhood of marshes; the inhabitants of these are more unhealthy, and are much troubled by insects, such as the mosquito, the sand-fly, &c. Indeed no remark can be more true than that which is general in the West Indies, that those places, much infested by insects, are always unhealthy."

The course of the seasons is next described, as a prelude to his account of the diseases. "In the month of May," he says, "soon after the rains begin to fall, the ague and remitting fever in general make their appearance, particularly on the hills, or in the neighbourhood of swamps. These, however, are much slighter, and more easily overcome, than after the rainy season; for the country having been for some months dry, a greater quantity of moisture is absorbed, and at the same time the falls of rain being much more gentle, the atmosphere is not so surcharged with vapour; and the bodies of the inhabitants having been, in some degree, braced up by the more cool weather preceding, do not yield, in so great a degree, to the debilitating powers of the miasmata. As the hot and dry season sets in, this fever is less common: now the ardent species becomes the reigning epidemic; and when troops arrive from

more

more moderate climates at this time of the year, they suffer very severely. This fever continues to rage with great force; but as the autumnal season approaches, the inflammatory symptoms are less violent, while those of debility are more evident, rendering the disease (if I may be allowed the expression) less pure; and as the rains set in, this fever ceases altogether, giving place to the remittent and typhus, which continue for some time after the rainy season, in general to the middle or latter end of December. From that time till the falling of the vernal rains, I consider the cultivated parts of the West Indies to be as healthy as any in the globe. Where men are guilty of intemperance, and expose themselves to the night air, a few sporadic fevers occur; these seem to be generally of the inflammatory kind."

The author is here speaking, it should be observed, of those parts of the islands which are cultivated: where that is not the case, and there are large and extensive morasses, the air is truly pestiferous; and as our armies are frequently encamped in the neighbourhood of these morasses, the mortality among them is dreadful.

The author is averse to the use of antimonials in the intermitting, remitting, or ardent fever: they increase the disposition to vomiting, to which patients, under these diseases, are too prone, and render it difficult, sometimes impossible, to be afterwards appeased. When called at the first attack, if the patients are of plethoric, sanguine habits, he takes away twelve, sixteen, or, in extreme cases of ardent fever, twenty ounces of blood. "I have always observed," he says, "smaller bleedings, repeated at short intervals, to be injurious; the violence of the inflammatory symptoms was not mitigated, and the patient, in a short time, had to combat, not only with the debility produced by the great excitement of the fever, but also with that brought on by the loss of blood; but where the blood was taken away in sufficient quantity, a diaphoresis, together with relief of the head and stomach, were almost always the consequence. In fact, I never found any thing so

powerful in alleviating the vomiting as blood-letting: the longer venæsection was delayed, the less did it appear to have any power in relieving the disease."

He then gives a purge with five grains of calomel, and ten of the compound extract of colocynth, the operation of which is to be promoted by a glyster, to be injected a few hours after. "I know no disease," he adds, "which bears such copious evacuations with so little debility as this does; indeed, the prostration of strength is very much relieved by the early use of blood-letting and cathartics; but if this evacuating plan be not very briskly followed up, the restlessness, anxiety, and headach, become more violent, and the skin grows more hot and dry; after this is the case, a second mitigation of symptoms is very difficult to be obtained."

The purging is afterwards to be kept up by giving, every six hours, doses of a weak solution of Glauber's, or some other neutral salt. By this method he had frequently the satisfaction of seeing his patients, in a few days, entirely freed from the fever. Blisters to the head, nape of the neck, or pit of the stomach, fomentations to the abdomen, and frictions to the legs and thighs, have been occasionally called in, he says, as auxiliaries, and with considerable advantage. In intermitting and remitting fevers he gives a strong infusion of the yellow bark, joined with aromatics and cordials; but in the ardent fever, even in its decline, bark, or wine, always exasperated the symptoms, and retarded the cure.

An account of the malignant, gaol, or spotted fever follows. The treatment recommended in this fever is similar to what is now generally adopted in this country. He prefers ipecacuanha to antimonials. He frequently gives draughts of cold water to excite a diaphoresis, and recommends the shower bath, or the affusion of cold water over the body with buckets, with the same view. He gives calomel and rhubarb to clear the bowels of hardened fæces, and afterwards a weak solution of some neutral salt to keep the body regularly open, and bark, wine,

wine, and a generous diet, to support the strength. Blisters are applied after the disease has continued some days, and opium in full doses, to relieve headach and procure sleep.

The last chapter contains "the diagnostic symptoms of the different fevers, the remitting, ardent, and typhus or gaol fever." This is an important part of the work, but will not admit of being abridged. It should seem, from an observation in the Preface, that the typhus and ardent fever have by some practitioners been confounded; and as they require modes of treatment diametrically opposite, such a mistake must have been attended with the most fatal consequences. "I have purposely omitted," the author adds in conclusion, "to describe the yellowness of the skin, the black vomit, and the hæmorrhages from different parts of the body, as I have seen them occur in every species of fever in the tropical climates."

On the whole, we strongly recommend this little work to practitioners purposing to reside in the West Indies.

---

ART. IV. *Traité des Plaies d'Armes à Feu, dans lequel on démontre l'Inutilité de l'Amputation des Membres à la Suite des Blessures faites par les Coups de Fusil, et l'Inutilité générale de cette Opération dans le plus grand Nombre des autres Cas.* Par MÉHÉE, Médecin, et Professeur à l'Hôpital militaire d'Instruction du Val-de-Grace. Octavo. 248 pages. Paris. 1800.

MANY treatises have been written on the subject of gun-shot wounds, and many observations are found scattered in the works of chirurgical writers on the same subject: in these the nature and mode of treating such wounds are described, and whether, under any circumstances, and at what precise time, it may be advisable to amputate a wounded limb. In the year 1792, the Academy of Surgery at Paris offered prizes to the person or persons who should discover the means of super-

seding the necessity of using a variety of instruments in extracting extraneous bodies from wounds, particularly from gun-shot wounds; and should describe clearly and distinctly the manner of using such as are absolutely necessary. M. Percy, senior surgeon of the army of the Rhine, who had before gained two prizes from the Academy, had the honour of obtaining this also. His dissertation, which was printed, is called The Army Surgeon's Manual, or, Instructions to military Surgeons on the Manner of treating Wounds, particularly gun-shot Wounds, with the Method of extracting extraneous Bodies from them.

The treatise before us is divided into three parts. First, the author enumerates the different accidents consequent on gun-shot wounds, as contusion and swelling of the part, followed by fever, convulsion, loss of strength, gangrene. He then shews the mode of appeasing these accidents, which can only be effected, he says, by enlarging the wounds when the ball has entered, or by making a wound more or less deep, when the part has only been bruised; in order to procure, by this artificial opening, a suppuration, by which alone the obstructed vessels may be emptied, and the parts restored to a sound and healthy state.

In the second part the author treats of the method of dressing gun-shot wounds in general, but particularly those affecting the joints, and of remedying the accidents consequent on such wounds. "Gun-shot wounds," the author says, "are always compounded; and they differ from each other only as they are more or less complicated. Before we treat on the method of simplifying them, it will be necessary to consider," he adds, "what is the nature of the complication we have to oppose? This consists, or is occasioned by the presence of some extraneous body in the wound; or in an artery, nerve, ligament, or tendon being bruised, torn, or destroyed."

In the third part the author treats of wounds of the head, breast, belly, or of the extremities of the body. He thinks

amputation

amputation of the wounded limb necessary only when gangrene of the part supervenes. He adds, "if a cannon-ball, or shell, strikes a leg or an arm, if it breaks the bone, and destroys all the surrounding parts, if it crushes to pieces the joint of the ankle or knee, the amputation of the limb may become necessary. But," he asks, "should the operation be immediately performed? or should it be deferred for a certain time? In answer to this question," he says, "however dreadful the accident, or severe the symptoms, amputation should never be performed until gangrene declares itself."—"But," observes the editor, "as the wounded person might die, although the part should not mortify, would not the life of the patient have been preserved if the limb had been removed? It is true," he goes on to observe, "if a strong and healthy person is so severely wounded as to endanger his life, and you amputate the wounded limb within twenty-four hours from the time of receiving the accident, he has then to suffer the consequences of two severe wounds or accidents together. But supposing a person to be so wounded, that life can be preserved by no known method but by taking off the limb, and that the patient, tormented by the pain of the wound, desires the limb may be taken off; ought we not in such a case to perform the operation, as giving the best chance for life, although we may not be certain of success by that method?" The author says, "By no means; we must, even in the worst cases that occur, wait the appearance of gangrene on the part; for in a wound of a joint, although the bones, tendons, ligaments, nerves, and vessels, should be bruised, torn, or crushed to pieces, life will not necessarily be destroyed, and all these accidents, and the effects of them, may be removed without amputating the limb." He is therefore averse to the performance of the operation on the field of battle, and, of course, during an engagement at sea: and thinks it would be precipitated if performed before the sixth day from the accident; by which time, if the means employed to remove the symptoms have not been successful, gangrene will take place.

The author has borrowed the idea of the doctrine contained in this work, it should be observed, from dissertations on the subject by Le Cat, Boucher, Bordenave, and La Matinière, which were also delivered to the Academy.

*Bibl. Française.*

---

ART. V. *Dr.* SAUNDERS's *Treatise on mineral Waters.*

(Concluded from page 300.)

AS the opinion of the author, concerning the sensible and medicinal effects of the Bath thermal springs, must be interesting to many of our readers, we shall lay it before them in detail.

There are few of the natural waters, he says, in which it is so difficult to separate the effects of the mere liquid, joined to temperature, from those of the foreign contents that are found in the fresh drawn water. Indeed this is in some degree impossible, because the increased heat appears to give an activity and power to substances so minute in quantity, that they would probably pass inactive through the circulation, were they taken cold. That much of the effect of Bath water is merely owing to its warmth, can hardly be doubted, and there may be some constitutions to whom this is the only effect, as well as some diseases which never require more than this simple remedy; but there are other habits, especially the delicate and irritable, who feel strongly the peculiar composition of this water, and with these it requires sometimes considerable precaution in its use.

The Bath water, Dr. Falconer observes, when drank fresh from the spring, has in most persons the effect of raising and rather accelerating the pulse, increasing the heat, and exciting the secretions. These symptoms generally come on very soon after drinking the waters, and with certain habits will last for a considerable time. It is, however, particularly in invalids that they are produced at all. The above-mentioned effects

fects then demonstrate that Bath water possesses heating properties, but at the same time shew that its stimulus is of a peculiar kind, and acts more immediately on the nervous system.

Besides these, it has also a considerable disposition to pass off by urine, even when taken in a moderate dose; and this may be considered as one of its most salutary operations.

Its effect on the bowels, like that of all waters which do not contain any purgative salt, is very various; but, in general, a costive habit of body comes on after the use of this water, not so much owing to any astringency which it may possess, as from the want of an active stimulus to the intestines, and probably also from the determination which it occasions to the skin; for if perspiration is suddenly checked during a course of Bath water, a purging sometimes supervenes.

These circumstances seem to shew that the stimulant properties of this water are primarily and more especially excited in the stomach, for it is there only that we can discover any thing peculiar in its operation, and it occasions at times a variety of symptoms, sometimes light and transient, but at other times so considerably permanent as to render its continuance improper. When the waters are likely to prove beneficial, they excite, on being first taken, a pleasing glow in the stomach, to which soon succeed an increase of appetite and spirits, and a rapid determination to the kidnies. On the other hand, when they occasion headach, thirst, and dryness of the tongue, when they sit heavy on the stomach, and produce sickness, and do not pass off by urine or perspiration, their operation is unfavourable, and their further employment is not to be advised.

One of the most important uses of the Bath water is, however, its external application; and its effects here appear to the author to differ in no respect from those of common water, heated to the same temperature, and similarly applied.

Bath certainly possesses considerable advantages in having

ing a supply of water sufficient to fill the numerous reservoirs for immersion, and to preserve them at a steady temperature. But its eulogists, not content with this, have affirmed, that, even when used externally, it exercises a stimulant power on the skin, which renders it preferable to common water. One of its most zealous advocates, Dr. Falconer, admits that, as a mere detergent, Bath water is inferior to rain water, since it is very hard, curdles soap, and has consequently a much less cleansing power; yet he asserts that it is superior as a stimulant application.

This appears to Dr. Saunders extremely doubtful; for whatever minute portion of active matter it may contain, that is capable of acting on the stomach, it appears by the most accurate chemical investigation, to be far too small in quantity, and too insignificant, to be felt by that less sensible organ, the skin. Such being the composition of the water, it is indeed difficult to conceive how, when used only as a bath, it should be more stimulant than common water; should raise the pulse and animal heat to a higher degree; should occasion much less relaxation and faintness, and leave the bathers more alert and vigorous for the whole day.

We are even assured, that these natural warm baths produce less perspiration, yet that they increase the urinary discharge much more than a common warm bath, and other circumstances equally difficult to be admitted. As all these effects however are only alleged to be greater in degree than those occasioned by a common warm bath, the author would refer them to the greater equability of temperature existing in the large natural baths; to the quantity of aqueous vapour in which the bathers are constantly immersed; and, in short, to any accidental difference either in the bath, or in the state of the patient, rather than to admit an opinion so contrary to all probability. One circumstance, he apprehends, will particularly give a preference to the natural bath, which is, the constant motion which the patients are using when immersed; the size

of

of the public baths being such as to admit the bathers to walk about with great freedom; and this alone will be sufficient, he thinks, to account for any slight difference that may be observed between this and a common bath. Most of the natural thermal waters possess this advantage of copious supply, a convenience which can seldom be commanded to any great extent in other situations.

The warm bath is used either generally or locally. The latter consists in pumping the water for a considerable time on the part affected. This mode, which is much employed at Bath, as well as at most of the thermal springs, both in this and other countries, is here called dry pumping, because in it only one part of the body is wetted, whilst the rest is kept dry. The continuance of this application is measured by the number of strokes of the pump, and from fifty to an hundred are generally used at a time. This is in many cases an excellent remedy; and the water thus applied, as it comes immediately from the fountain-head, is of a considerably higher temperature than in the large baths, which require some hours in filling, and thus lose several degrees of their heat.

The diseases for which these celebrated waters are resorted to, are very numerous, and are some of the most important and difficult of cure of all that come under medical treatment. In most of them the bath is used along with the waters as an internal medicine. The general indications of the propriety of using this medicinal water are in those cases where a gentle, gradual, and permanent stimulus is required, and where there is little to be feared from the sudden and transient heat, and increase of pulse, that so often attend its exhibition. Bath water may certainly be considered as a chalybeate, in which the iron is very small in quantity, but in a highly active form; and the degree of temperature is in itself a stimulus, often of considerable powers. These circumstances, again, point out the necessity of certain cautions, which from a view of

the mere quantity of foreign contents might be thought superfluous. Although, in estimating the powers of this medicine, allowance must be made for local prejudice in its favour, there can be no doubt but that its employment is hazardous, and might often do considerable mischief in various cases of active inflammation, especially in irritable habits, where there exists a strong tendency to hectic fever; and even in the less inflammatory state of diseased and suppurating viscera, and in general, wherever a quick pulse and dry tongue indicate a degree of general fever. The cases, therefore, to which this water are peculiarly suited, are mostly of the chronic kind, and by a steady perseverance in this remedy very obstinate disorders have given way. A few of the principal are enumerated by the author.

Chlorosis, a disease which at all times is much relieved by steel, and will bear it, even where there is a considerable degree of feverish irritation, receives particular benefit from the Bath water; and its use as a warm bath excellently contributes to remove that languor of circulation and obstruction of the natural evacuations which constitute the leading features of this common and troublesome disorder.

The complicated diseases which are often brought on by a long residence in hot climates, affecting the secretion of bile, the functions of the stomach and alimentary canal, and which generally produce organic derangement in some part of the hepatic system, often receive much benefit from the Bath water, if used at a time when suppurative inflammation is not actually present. Dr. Saunders can only, however, consider it as an auxiliary of some efficacy, but by no means as forming the principal part of the plan of cure.

Another and less active disease of the biliary organs, the jaundice, which arises from a simple obstruction of the gall-ducts, is still oftener removed by both the internal and external use of these waters.

Bath

Bath is better known than most other watering-places, as a resort for patients afflicted with those disorders, which at first, and in their most inflammatory state, affect the whole constitution, and afterwards leave a weakness, loss of motion, pain, or other diseased condition of particular limbs. Of this kind are gout, rheumatism, and several other diseases, which give rise to many varieties of paralysis. It is not the author's intention to give a history of these formidable complaints, which often require the utmost skill in their treatment; but merely to offer a few remarks concerning the use of this remedy in such cases. We should always keep in mind that this water, whether from its warmth or from other causes, though capable of increasing a febrile state of body, where such already exists, will seldom if ever produce it in a healthy subject. In each of these disorders there is at one time or other a high phlogistic diathesis, which is generally so well marked as not to be easily mistaken. Most of the patients affected with them do not apply to Bath till long after the first inflammatory stage is over, and this is especially the case in rheumatism and gout. Paralytic affections are the effect of a variety of morbid causes, but are often connected with original structure, and a constitutional determination to the head; and in these disorders alone does it appear, that this water can ever be so misapplied as suddenly to produce considerable mischief. In almost every other case we have ample time to watch the effects of this remedy, and if it proves detrimental we may stop its application before any real injury be done. In rheumatic complaints, the power of this water, as Dr. Charlton well observes, is chiefly confined to that species of rheumatism which is unattended with inflammation, or in which the patient's pains are not increased by the warmth of his bed. A great number of the patients that resort to Bath, especially those that are admitted into the hospital, are affected with rheumatism in all its stages, and it appears from the most respect-

able testimony that a large proportion of them receive a permanent cure.

In gout the greatest benefit is derived from this water, in those cases where it produces anomalous affections of the head, stomach, and bowels; and it is here a principal advantage to be able to bring by warmth that active local inflammation in any limb which relieves all the other troublesome and dangerous symptoms. Hence it is that Bath water is commonly said to produce the gout, by which is only meant, that where persons have a gouty affection shifting from place to place, and thereby much disordering the system, the internal and external use of the Bath water will soon bring on a general increase of action, indicated by a flushing in the face, fulness in the circulating vessels, and relief of the dyspeptic symptoms; and the whole disorder will terminate in a regular fit of the gout in the extremities, which is the crisis always to be wished for. That painful and obstinate colic produced by the poison of lead, and the paralysis or loss of nervous power in particular limbs, which is one of its most serious consequences, is found to be peculiarly relieved by the use of the Bath waters, more especially when applied externally either generally or upon the part affected. In this disorder there is seldom if ever any thing to be apprehended from the stimulant effect of these waters, but all the action which it does exert is highly salutary. It forms, therefore, a very important remedy in these cases at all times, but especially after the first affection of the bowels is removed, and only the partial paralysis remains.

Besides these disorders, for which the Bath waters may be said to be peculiarly calculated, there are others in which this medicine probably operates, principally as mere water of a certain temperature. Such are in general all those for which warm bathing and a warm diluent may at any time be of advantage; and which therefore do not concern its powers as a mineral water. The cure of various cutaneous complaints, and the

relief

relief produced in hypochondriasis, by the warm bath, and much of the benefit derived from the water in dyspeptic affections, spasm of the stomach, or intestinal canal, and similar disorders, may, the author thinks, fairly be attributed to this cause alone; and therefore, to complete the history of the medical powers of this as well as every other water, he refers the reader to those parts of the work that treat of the warm bath, and the aqueous regimen.

The quantity of water taken daily during a full course, and by adults, is recommended by Dr. Falconer not to exceed a pint and a half or two pints; and in chlorosis with irritable habits, not more than one pint is employed. The morning is constantly the time for taking the waters, and the daily allowance is generally divided into three portions, of which two may be taken before breakfast at different times, and one afterwards. As the water of the Cross bath is considered as less stimulant, and is certainly lower in temperature; this is sometimes introduced, by a refinement in practice, where the King's bath is supposed to be too heating. From the difference in the calculations it is impossible to give the precise dose of foreign ingredients taken daily with such a quantity of water; but according to our general estimate, it is probable that each dose of half a pint contains no more than half a cubic inch, or about two drachms in bulk of carbonic acid, and as much azotic gas, and perhaps five grains of soluble neutral salts, and the same quantity of earths and earthy salts. The proportion of iron it would perhaps be of more consequence to ascertain with exactness, but this is so small, that the highest computation would not make it so much as $\frac{1}{70}$ of a grain in half a pint of the water, and therefore we cannot at present come to any exact conclusion upon this subject. The whole, however, furnishes a striking example of considerable effects produced by quantities of active substances, so very minute, that in any other situation, they would be thought, and perhaps justly, to be perfectly inadequate to bring on any change

change whatever in any function of the human body; and therefore whatever powers Bath water may have above those of simple warm water, are eminently due to the peculiar mode of combination of its foreign contents.

The time at which the bath is made use of is generally the morning, which is partly for convenience, and partly because this has usually been considered as the best time for this application. This is by no means, however, invariably the case; and in using the cold bath it is often necessary to deviate from this general rule. From two to three times a week the warm bathing is usually employed, and the patients continue in from ten minutes to half an hour. If it produces headach, or any degree of vertigo, it must be used very carefully in persons of a full plethoric habit; and the time of remaining in the bath is in a great measure to be regulated by the sensations of the patient, who should always leave it when any degree of lassitude or faintness comes on. The choice of the different baths is here a circumstance of more importance, perhaps, than when the water is employed for internal use, since there is a very decided difference in their respective temperatures. That of the Cross bath is about 94°; whereas the Hot bath is at least eight degrees higher; and, therefore, the former is in fact only a tepid bath, being of a less heat than that of the human body, though it feels warm to the skin, even on the first immersion. The topical warm bath, applied by pumping on any diseased part, from the impetus of the falling water, is always a greater stimulus than mere immersion; and as the system is not thereby generally affected, it may be used in every case more frequently and with greater freedom than any other way in which these waters are ever employed.

The waters of Bath are certainly among those that require a considerable time to be persevered in before a full and fair trial can be made. Their operation is very gradual, as indeed might be expected from a medicine which shews so few sensible

sible properties or immediate effects. Frequently too they are apt to lie heavy upon the stomach when they have been taken for some weeks; and when this is the case, they must be intermitted for a time, and may afterwards be resumed. Indeed it must be owned, that a large proportion of the patients who resort to these springs are afflicted with disorders that are in themselves only to be palliated, or at least are always very difficult of cure. Chronic rheumatism, habitual gout, dyspepsia from a long course of high and intemperate living, and the like, are disorders not to be removed by a short course of any mineral water, and many of those who have once received benefit at these fountains find it necessary to make an annual visit to them, to repair the waste in health during the preceding year. However, with well-regulated expectations and a judicious mode of treatment, the invalid will seldom be here disappointed; and we may fairly consider the thermal springs of Bath as among the most valuable natural waters which our island possesses.

Having finished an account of the principal mineral waters, each of which may be considered as forming the head of a class under which those possessed of weaker powers, but of similar virtues, may be arranged, the author proceeds to that part of his subject designated in the title-page by "*Remarks on the aqueous Regimen.*" This is an ambiguous phrase, as it leaves us at a loss to determine whether it be intended to point out the regimen proper to accompany a course of mineral waters, or that of which mere aqueous dilution constitutes the chief peculiarity. It is the latter of these two senses, however, in which the author wishes it to be understood. Introductory to this part of the work, we have the following account of the functions of the stomach.

"The process of digestion we know is a complex operation, but principally performed by the solvent power of the gastric juice, and the action of the stomach itself upon its contents. The gastric secretion depends chiefly on the healthy action of

the stomach; and this again is kept up by the stimulus of the gastric liquor, by the particular nature of the alimentary contents, and by the circumstance of distention arising from mere quantity. As far as the preparation of food within the stomach is concerned, it would appear, that in a vigorous healthy organ, any more water than is necessary to give a due consistence to the food, will retard digestion. This it will do by weakening the activity of the gastric liquor, by diminishing the stimulating quality of the food, and therefore its action upon the stomach; and, if the water be cold, by suddenly abstracting part of that temperature which appears to be so necessary to the complicated process of digestion, and the regular evolution of which cannot be disturbed with impunity. The retardment thus produced will only be counteracted by an increase in the stimulus arising from mere distention. But if no more aqueous dilution were employed than what was solely necessary as a solvent for the solid part of the aliment, the additions thus thrown into the circulating mass by the chylopoietic organs, would probably be too stimulating in their nature, and perhaps too soon animalized; and hence a strong tendency to plethora and an inflammatory state of body would be produced, and various disorders of the system would follow. On the other hand, if the powers of the stomach are naturally weak, so that digestion is a very slow process, the spontaneous chemical changes that the food would take on out of the body, begin within the stomach before they can be prevented by the proper action of that organ and its secreted liquor; hence the acidity of stomach, heart-burn, and eructations, and all the train of symptoms included under the general term dyspeptic. But these again will be prevented in a great measure by proper dilution; as the simple addition of water will moderate the stimulus of high food when too strong for the action of the stomach, and at the same time will hasten the propulsion of its contents into the intestines by assisting in the change requisite to be

produced

produced on the food previous to its entering these organs. Hence it is, that there appears to be good reason to expect benefit from aqueous dilution to a certain degree in very different states of body; that is, both when the circulating fluid is too stimulating, owing to an abundance of strongly nutritious aliment, and a rapid digestion; and also, in that state which is a consequence of the former, a debilitated stomach and defective nutrition, owing to the inability in the digestive organs to assimilate common food in merely its usual state of dilution with watery liquid."

On this account of the process of digestion, we may first observe there is reason to believe that solid matter alone is capable of being acted upon by the gastric fluid, the immediate operation of which is to coagulate whatever is received as aliment into the stomach: secondly, that it is at least doubtful how far dilution can in any case promote the digestive process, since it tends to dilute, and of course to weaken the gastric juice, by the agency of which digestion is performed, and its deficient reaction is the most common of all causes of dyspepsia: thirdly, the example of all other animals, whether frugivorous or carnivorous, who follow the instincts of nature, would lead us to doubt whether taking a quantity of water into the stomach tends to promote digestion, as no animal drinks at the time it eats, nor for some interval afterwards, except man; in him thirst is probably excited by the unnatural use of condiments: and fourthly, some very ingenious experiments, lately made, appear to prove that the quantity of fluid taken in with the aliment is of little consequence. Two animals of the same species were taken; to each was given the same quantity of dry aliment, into the stomach of one of which several quarts of water were forced, and the œsophagus and duodenum immediately tied up. After a short interval, the stomachs of both were opened, and their contents were found equal in point of moisture; a proof that the absorbent and reactory vessels of the stomach possess a power

of adapting the fluidity of the aliment to the powers of digestion. Indigestion, we are persuaded, is far more commonly the consequence of the habitual use of inordinate stimuli, than of defective dilution.

In the physiological part of this work, the frequent occurrence of the terms stimulus, excitement, debility, &c. tends to shew the silent and unobserved progress of certain medical doctrines recently introduced; and of which, many who make habitual use of the terms, yet in public profess their general disapprobation. Of such terms, however, in a medical work which is evidently of a popular nature, there ought to have been some definition given; for, however familiar they may be to professional men, they are not intelligible in the same sense by the public.

The author's account of the effects of what may be considered as too true a picture of the modern habits of life is interesting:

"Another and more decidedly beneficial use of water as a medicine, is in relieving those deranged functions of the stomach and bowels, and biliary organs, occasioned by the most frequent of all causes of disease, especially with men of a middle age and in easy circumstances, a long and habitual indulgence in high food, strong drink, and all the luxuries of the table. In such cases there are three direct causes of disease which operate at once in producing the morbid changes; they are, too large a quantity of food for the wants of the body, too great a proportion of solid to fluid aliment, and all the ingesta of too stimulating a kind.

"The stomach, being here in a constant state of high excitement and over-distention, becomes gradually debilitated, and unable to perform duly the office of digestion; hence arise heart-burn, flatulence, and sour eructations, the effect of the spontaneous changes produced in the mass of food when not entirely checked by the digestive process; hence too a great irregularity in the secretion of bile, either on the one hand

hand highly acrid, so as to increase the morbid stimulus on the stomach by regurgitation on that cavity, or else scantily supplied, and therefore unable to complete the separation of chyle, and producing obstinate costiveness from the absence of the necessary and healthy stimulus on the intestines. At length, too, comes on an alarming defect of nervous energy, and a dangerous determination to the head, and palsy or apoplexy often complete the derangement of the animal frame."

To the chapter on the external use of water we find the following introduction:

"We have hitherto considered the use of water as an article of diet, and as an internal diluent in acute and chronic diseases; there is another very important application of this liquid, which deserves attention—its employment externally as a bath, either general or partial, and at any temperature from ice-cold to a degree of heat as great as the skin can bear it.

"The circumstance of the animal temperature being about a medium degree between these extremes, the great effect that immersion has upon that temperature, and the powers of the body that produce and regulate it, have caused an essential difference in the physiological and medical view of the subject, according to the degree of heat at which immersion is employed; and therefore it will be necessary to consider separately the subject of bathing, in a heat much under that of the animal, and in one that nearly equals or is above it. We shall find that in proportion as these two extremes of temperature approach each other, they become less powerful, each in their particular mode of action; so that, although the distinction of the cold from the warm bath be very decided, the tepid bath partakes in some degree of the properties of each."

The author thus endeavours to account for the glow that takes place after immersion in cold water:

"The sensations of returning warmth, which take place directly after the cold of the first immersion, constitute what has been called the reaction of the system; and this is certainly a proper and characteristic term, as it imports an action produced in the body itself, to resist an external impression. Reaction in this place seems to be a peculiar effort of the living power, and to be excited in a degree proportionate to the force of that power, and to the intensity of the cause which called it into action. It implies not merely an increase of the production of animal heat; but, superadded to this, a sudden effort within the body and the whole arterial system, to overcome an impression on the extremities as sudden and powerful. Hence it is, that a mere abstraction of heat, by a cold medium, will not produce that which is precisely meant by reaction, except the external cold be applied suddenly, and to a large surface. These two conditions are fulfilled by sudden immersion into cold water."

It appears to us doubtful whether any reaction of the system takes place while the body remains in water of a much lower temperature than its own. The water in immediate contact with the skin acquires, indeed, a certain degree of warmth, in consequence of which the heat of the body is less rapidly diminished; but if fresh quantities of water of this low temperature were applied in succession, the powers of the living body would at length be exhausted by its efforts to maintain the natural degree of heat. The glow succeeding to immersion in the cold bath, we think, is better explained on the principle, that after a temporary exhaustion and reapplication of any of the usual stimuli they act with augmented energy. After remaining some time in water of 50°, the atmospheric air of the temperature of 65° has the effect of a powerful stimulus in increasing all the vital actions.

Many excellent observations on the use of the cold bath, both in health and in disease, will be found in this section, which our limits forbid us to notice. The author's remarks

on

on some complaints in which the cold bath proves injurious, are likewise important.

There are some disorders, he says, that require a tonic and stimulant plan of cure, which, from a peculiarity that he cannot well explain, are almost always hurt by cold bathing. Of this kind is the chlorosis, a disease often extremely obstinate; and, from the age at which it usually affects females, always exciting a good deal of anxiety. Although in most diseases not attended with a determination of blood to particular vital parts, where a general tonic plan is indicated, the cold bath forms an useful auxiliary; yet he has here almost invariably found it to be detrimental, and to increase the headach, chilliness, and languor, which at all times attend this disorder.

Of the warm and tepid bath, the author speaks in such a manner as, we hope, will tend to bring those extensively operating medical agents into more general use in this country. He says "warm bathing appears to be peculiarly well calculated to relieve those complaints in the bowels that seem to depend on an irregular or diminished action of any part of the alimentary canal; and the state of the skin produced by immersion in warm water, seems highly favourable to the healthy action of the stomach and bowels. Hence we find that the natural thermal springs, when used as a bath, have all acquired a high and just reputation for relieving colics and obstructions in the bowels, when they depend either on a defect of the bilious secretion, or on a directly sedative and paralyzing cause, such as the poison of lead, and similar complaints; and the same effect is produced, though in a less degree, by warm fomentations to the abdomen.

"Another very important use of the warm bath is in those herpetic eruptions, where there appears a great deficiency of perspirability in the skin; when it cracks, and leaves deep and painful fissures, which discharge a thin serous fluid; or else where there is a constant desquamation of cuticle in dry bran-

like

like scales. The warm bath is here highly advantageous in relaxing the skin, and rendering it more pervious, and prepares it admirably for receiving the stimulant applications of tar ointment, mercurials, and the like, that are intended to restore it to a healthy state. These complaints, however, require only a low temperature of the warm bath, so as to be merely relaxing, and not rising to any great degree of stimulus from heat.

" The constitutions of children seem to be more extensively relieved by the warm bath than those of adults; and this remedy seems more generally applicable to acute fever in them than in persons of a more advanced age. This is probably owing to the greater degree of irritability in the habits of children, a greater tendency to irritation in the alimentary canal, and the very strong sympathy with the state of the skin, which it always shews. Where the warm bath produces its salutary operation, it is almost always in children followed by an easy and profound sleep.

" I cannot omit this opportunity of giving a caution with regard to the use of the cold bath in the true menorrhagia of females, and, instead of it, to recommend that of tepid warmth, or even higher. From the great degree of pain and uneasy sensation about the loins, and the general feverish irritation which attends this discharge, it requires in almost all cases to be considered as an active hæmorrhagy, produced by a determination of blood to the uterus, in the same way that hæmoptysis is brought on by a determination to the lungs. The cold bath commonly does harm in these cases, and increases the pain of the loins and general fever; but I have often experienced much benefit by a bath of a tepid or warm temperature, applied as a semicupium.

" The powerful and extensive stimulus of heated water is used to very great advantage in paralytic affections of particular parts; whether the consequence of general derangement in the circulation, and the alarming relics of apoplexy, or

arising

arising from local injury on the spine, or the origin of the nerves. In such a loss of nervous energy, where there is already a want of due animal heat in the part affected, and a languid circulation, all external cold is prejudicial, as it will not excite any adequate reaction. But the direct stimulus of heat, as applied by the hot bath, and elicited by friction, is here found materially to assist in the restoration of the diseased part to a state of health and vigour. Of all the morbid affections of particular parts, there is none that bears and requires a greater degree of external heat than paralytic affections: and here too the effect may be assisted by any thing that will increase the stimulating properties of the water; as, for instance, by the addition of salt, which will have full opportunity of exercising its powers, both from the length of time in which the patient or the diseased part continues immersed, and the greater sensibility of the skin, when warm and moist. Here, therefore, we may expect particular benefit from the warm sea-baths which have been established in a few parts of this kingdom, or in the natural saline thermal springs of Carlsbad or Aix."

In the concluding chapter of this work, containing "general remarks on the contents of mineral waters, and their operation," the author appreciates, we think, with great judgment and candour, the effects of mineral waters in general. Of his mode of reasoning on this subject, we shall present our readers with a short specimen:

"It is urged by some of the merely practical writers on particular mineral waters, that the mode in which their active contents operate is equally mysterious with that of some of our most powerful medicines, such as mercury and opium, and probably likely always to remain so; and therefore that accurate chemical examination is little else than philosophical trifling. But it should be remembered, that every medicated water is a compound, at least, of the water itself, and of that which gives it its sensible properties, and these it is the peculiar

peculiar object of chemistry to separate, and to estimate their respective proportions. Now, no practitioner will deny that it is of consequence to know the proportional quantity of each ingredient in a compound form of medicine, that he may at least endeavour to ascribe to each its particular operation, although he does not pretend to explain how that operation is to be brought about.

" If, then, we suppose a physician to employ in different cases a great variety of compound medicines; in which, however, there was one ingredient common to all: and if, among the various changes produced by these medicines, there were certain effects common to every case, he would naturally be led to suppose that these were produced by that ingredient which entered into each of his formulæ, and he would be thereby led to try it alone, and observe its operation, unconnected with that of every other active substance.

" This appears to be the case with all the variety of mineral waters that are used medicinally. They have only one ingredient in common—the water itself; they all produce effects on the human constitution in some degree similar, which I would chiefly attribute to the watery vehicle; but, besides, there are several that act very powerfully on the body in different ways, and these effects are such as water alone cannot produce, but depend on the very active contents which entitle these springs to the appellation of mineral, and in which they differ from the generality of waters used for common purposes."

The importance of the volume under consideration has led us to extend our extracts and observations to an unusual length. The author concludes by mentioning his motives for undertaking, and the intentions he had in view in executing this work: that he has fulfilled all of them in the most ample and satisfactory manner, will, we are persuaded, be allowed by every candid reader.

" There is nothing more gratifying to the physician, who considers the healing art in its true light, that of an experi-

mental science, than to be able to add to the general stock of professional knowledge, information which is to be afforded by the assistance of a collateral science. Of these, none is more intimately connected with medicine, by a community in many of the objects, than chemistry; and the aids which this science furnishes, are constantly increasing, on account of the rapid accumulation of experimental knowledge. An inquiry into the nature and right application of mineral waters is certainly not one of the least important objects of physic; since these are remedies that have been at all times peculiarly favourites with the public, and have deserved, from their real efficacy, much of the esteem in which they have been held. The substances concerned in the composition of these waters are such as come particularly under the accurate and distinguishing eye of modern chemistry, and admirably illustrate some of its most beautiful discoveries. They have engaged the attention of the ablest chemists for many years in various countries, and the importance attached to these inquiries has abundantly repaid the labour and difficulty of the research.

"Impressed with the idea that the science of chemistry has done more to illustrate this than almost any other class of natural substances that are used medicinally, it has been my wish in the foregoing pages to lay before the public a general view of our present state of knowledge on this subject; in order to ascertain with some precision the practical advantage to be derived from these facts. Viewing with some regret the apparent slight which has been thrown upon these inquiries by some whose professional knowledge attaches much weight to their opinions, I have endeavoured to clear away some causes of error arising from too partial and confined a view of the subject; in order that the leading features of medical chemistry attached to these inquiries may be rendered more conspicuous; and my object in undertaking this work will be answered, if these pages will at all contribute to the advancement of the healing art."

ART. VI. *Mémoires ou Considérations sur les Sourds-muets de Naissance, et sur les Moyens de donner l'Ouie et la Parole à ceux qui en sont susceptibles.* Par U. R. T. LE BOUVYER-DESMORTIERS. Octavo. 266 pages (avec une figure). BUISSON, Paris. 1800.

THIS work is divided into three parts, or sections. The first contains general observations on the subject: in the second, the author examines whether persons born deaf may be cured by art; and in the third, the means by which this may be effected.

"When deafness is occasioned," the author says, "by a deficiency or mal-conformation of any of the parts constituting the organ of hearing, or when the membrane of the tympanum is become cartilaginous or bony, there are no known means by which such a person may be rendered capable of hearing; but when deafness is occasioned by a simple obstruction of the vessels, there is hope of a cure being effected." The author grounds this opinion on the cases of two persons, who having been deaf and dumb to the age of 27 years, at length acquired the faculties of hearing and speaking; one of them, it seems, naturally, and without the aid of medicine. But the particulars of the cases are not given. The author intimates, that he has had a considerable portion of experience in this line of business, although he was not brought up, he says, to the practice of medicine. He gives, however, only a very partial account of one young woman, whom he electrified for the space of six months, at the end of which time she was able to hear the sound of a violin; encouraged by this essay, the author recommends to his countrymen to found an establishment for the reception of deaf and dumb persons, to give a further trial to electricity, or such other means as may be thought likely to succeed.

*Bibl. Française.*

ART.

ART. VII. *An Inquiry into the History, Nature, Causes, and different Modes of Treatment hitherto pursued in the Cure of Scrofula, pulmonary Consumption, and Cancer. The Second Edition. To which is added, an Appendix, containing a Letter to a celebrated Professor of Edinburgh, on the peculiar Principles adopted by the Author in their Treatment, and the Necessity for a circumscribed Line of Practice, in order to be successful.* By WILLIAM NISBET, Fellow of the Royal College of Surgeons, Edinburgh, one of the Surgeons to the Royal Infirmary, &c. now of London. Octavo. 275 pages. JOHNSON, London. 1800. Price 5*s*.

THE first impression of this work having appeared in 1795, our readers will not expect from us a detailed account of its contents. The author's intention has been to exhibit a full view of the various forms and effects of scrofula and cancer; with an examination of the different modes of practice hitherto adopted in these diseases; and some general conclusions deducible from the whole.

In the former edition, Dr. Nisbet suggested "with confidence," that all the external appearances of scrofula, "either of swelling or ulceration, affecting the soft parts, may be removed with ease and certainty; and of the internal forms, that pulmonary consumption, taken before an advanced period of hectic, may, in the greater number of instances, be cured." His hopes, in the treatment of cancerous complaints, although not quite so sanguine, were, nevertheless, such as few practitioners besides himself would entertain: for he seems to have expected, "in a disease so deplorable as cancer, while yet in its occult state, that nine out of every ten cases might be saved;" and that, "in the ulcerated stage, much may be done to mitigate, if not always to cure."

We should have been extremely gratified, for the sake of humanity, if these promising and desirable events had been since realized. But, as the author then pledged his word, "at no

distant period," to lay the result of his practice before the public, " whether good or bad," and has not now expressed himself in similar terms, nor with the same confidence as before, we imagine his philanthropic endeavours have been partly disappointed. All we can gather from the work before us, respecting the author's actual progress, is this: that " his practice in these diseases is *peculiar*;" and that " he wishes, therefore, the success of it should be established to the satisfaction of the faculty at large." The mode of reasoning he adopts, and the principles on which he founds his practice, are stated in the following manner:

" In regard to scrofula, when we examine the bills of mortality, it appears that one half of the children born, die before the end of two years, and of this half, we may safely assert one third is cut off by scrofula, under the form of mesenteric consumption. Thus one fifth of the whole population in this country falls a sacrifice to this malady, at an early period, or in the very outset of their existence.

" From the third or fourth year, to the age of puberty, its external forms are most prevalent. From them, if we except white swellings, the mortality is not so great as during the former early period, for time here often gives that relief, which medicine has been found to deny, yet still before this relief is obtained, such lesion occurs in the parts affected by the disease, as to bear through the remainder of life the marks of its disgusting ravages.

" After the age of puberty, and to thirty-five, we arrive at the critical æra when its attacks are most formidable: when its internal form breaks forth under pulmonary consumption, and when it reigns with insidious triumph over the bloom of youth and vigour of life in both sexes. No less than ten thousand annually, in Britain, of the young, the beautiful, and ingenious, fall a sacrifice to the slow and rooted grasp of this destroyer, who generally singles out, as observed by authors, the most amiable of a family for his prey.

" To

" To direct our attempts then in counteracting the fatal consequences of this wide-spreading evil, this giant disease, we must call in observation, experience, and anatomy, to our aid, and from their combined assistance, endeavour to lay down such principles as will bear that ultimate and surest test, their successful application to practice.

" In calling in the first of these, all our observation will concur, in shewing that, in this disease, a general lax state of solid prevails, that a marked debility is universally present in the system, and that this debility is accompanied with an enlargement of particular glandular parts, proceeding, in its ultimate progress, to affect even the bones or most solid structure.

" When we trace the disease still farther, we find it unknown in high extremes of temperature, that its influence is only conspicuous in a cold moist climate, and that its attacks there are not peculiar to the human species, but extend also to a number of other animals: that the fluids submitted to the same observation, differ from those characterizing the regular state of health: that they possess, as well as the solid, a primary vitiated change; and in the progress of the disease they display also a morbid alteration, differing from the usual morbid changes induced by common inflammation.

" From these combined facts, then, no doubt can exist, that both the particular nourishment, and situation, are equally in fault, and alike instrumental in the production of the malady.

" But whatever the causes of the malady may be, it is the apparent symptoms alone that are to direct us in counteracting its consequences. Proceeding on this basis, from the apparent feebleness of constitution, the lax state of solid, and the other concomitant marks of debility, the first indication that arises is clear and determined, and the use of tonics pointed out both in diet, and in medicine, in the most certain and unequivocal manner.

" Under

" Under certain circumstances, that tonics have cured the disease, the facts of writers sufficiently evince. Where they have not cured, that they have materially arrested its progress, is equally ascertained; that the age of puberty, acting as a peculiar tonic, removes the milder external forms of the malady, is fully established. When such remedies then have been found inadequate to this full effect, all that can be inferred from their failure, or rather incomplete action, is, that the curative views of physicians have not been sufficiently extended to account for the defect, and that they have regarded the disease as incurable, chiefly from their circumscribed modes of practice.

" For if we call in more minute observation to direct us, and trace the leading morbid symptom or debility farther, by descending into the special circumstances that characterize it, we find its prominent feature to be an enlargement of the lymphatic glands. Dissection shews that in all cases they are here larger than natural, and commonly in a softer state; that in the progress of the affection they acquire also peculiar ultimate changes, differing from the changes of common inflammation. Every practitioner is fully acquainted that these glands, and their branches, form a peculiar series or system of vessels by themselves; that their action is totally independent of the larger vessels, being no way influenced by the state of the latter, at least not always in a primary degree. Hence we can easily account for the use of tonics having commonly so little power in the cure of this enlargement, and that a special indication must be formed, suited to this particular state itself. Many physicians, on the other hand, attentive only to this symptom, have regarded the disease as consisting in it alone, and have accordingly adapted their practice to counteract this partial morbid change. Thus remedies capable of acting on the small vessels, as mercury and salts, of various kinds, have been extensively employed under different forms, and often with effect; but the same reasoning is applicable here,

here, as to the former indication. These remedies have failed more frequently than done service, and, when failing, have rather confirmed physicians in a persuasion of the incurability of the disease, than convinced them of their too circumscribed ideas on the subject.

" Such are the indications to be formed in regard to the state of the solid; but these indications, I contend, are still imperfect, for the complete cure of the disease.

" From the facts already adduced, it is clear that a primary vitiated state of the fluids also exists, and that this state requires an equal consideration in the treatment, before health can be restored: this is strongly evinced by the peculiar nature of the discharge in scrofulous cases, by the cheesy, curd-like appearance it assumes, and by the strongly marked want of that principle of cohesion between the parts of the fluid which we find to exist in other cases. Like the other morbid circumstances, this has been taken up also by itself, and the cure of the disease expected to succeed by an attention to this humoral pathology alone. Hence the attempts to remove it by means of the carbonic acid, or a supply of oxygen in various forms, which, since the institution of pneumatic medicine, has formed the great and popular line of practice.

" That a defect of oxygen may exist in the scrofulous constitution, I do not pretend to deny, but at the same time I can by no means admit that the disease is constituted by this defect alone. The same defect is found to exist in other diseases which exhibit appearances very different from scrofula, and the same cause cannot alone produce effects so apparently different. If a defect of oxygen therefore does exist in scrofula, it is but one link of the chain. It does not form the whole, and it deserves only regard in so far as establishing one indication for the cure. Much praise however we allow is due to Dr. Beddoes, for his unwearied exertions in this new department of the healing art; but from all my experience, the application of medicine in the gaseous form has not been sufficiently

sufficiently permanent, even when successful, to continue a lasting cure. In all the reports of pneumatic medicine, we find also the greatest success has been displayed where the gases have been combined with other remedies of a more fixed nature. By themselves they will only deceive, or produce a temporary palliation of symptoms; and Dr. Beddoes himself, I believe, has experienced in many cases of consumption, that

> —'Like the baseless fabric of a vision,
> 'They leave *but* a wreck behind.'

At the same time I am far from wishing to discourage the laudable enthusiasm of pneumatic practitioners; I only maintain, that scrofula, especially in its internal form, or consumption, must be attacked by a more enlarged and combined treatment than the gaseous applications afford. Whoever inspects the lungs of pulmonic patients, will not readily believe that such derangement of structure, as their dissection displays, can ever yield to a puff of air, and that medicine in a more fixed and durable form will be necessary to produce the very great change that is there required. That the gases will have a quick influence in palliating certain uneasy sensations is sufficiently established, and their immediate contact with the seat of the disease recommends their exhibition for this purpose; but, previous to any such exhibition, if they are to be successful in the cure, a general state of the system must be produced favourable to reformation. It is not the seat of the disease that forms the true cause of its fatality, for abundant are the instances on record of wounds of the lungs, and other lesions of their surface, readily uniting. Hence it is not the mere application of a remedy to the seat of the disease, that is to cure the malady, without this application can at the same time produce all those other necessary changes which the system requires, or counteract the various morbid circumstances which concur to form the disease. In this respect the deficiency of pneumatic medicine is now known.



"I have

" I have thus pointed out the state of the solid and fluid in scrofula, as differing from that which characterizes the proper habit, distinguished by vigour and health. I have shewn that indications must be formed, suited to all the various morbid circumstances that exist in this disease, and that a want of attention to this combination has produced its supposed incurability, not its own nature—The various modes of producing this combination will easily strike every practitioner, and may be formed according to his particular judgment. If the leading features of the disease, as detailed, are kept in view, he can be at no loss, but on the strict and minute observance of this particular the sole success of the treatment will depend.

" I shall now pursue the same investigation as has been done in scrofula, in pointing out the peculiar principles applicable to the second affection, or cancer.

" The mortality from cancer, though not so extensive as the former disease, appears by the yearly bills to be daily increasing. While most of the modifications of scrofula are attended with little uneasiness to the patient, the sufferings from cancer are exquisite in the highest degree. Time, which we see gives relief in some species of scrofula, gives, on the contrary, added force to the morbid state in cancer; and thus that small consolation, which at times attends scrofula, is here denied the unhappy patient. Hope, the only solace of the wretched, is banished from the cup of the sufferer, under this formidable malady,

" When we collect the facts on cancer, we find it almost always the attendant of advanced life, and consequently a disease connected with debility; but on farther investigation, the nature of this debility we do not find, like that in scrofula, distinguished by a lax incohering solid; on the contrary, in cancer the general state of the solid, and even the apparent health, does not bear any marks of being in fault. The sole derangement appears to exist in the glandular enlargement;

and like the enlargement in scrofula, when we examine minutely its history and progress, we find it, or at least the predisposition to it, at this period of life, not confined solely to the diseased part, but extending over the system at large. By dissection also of such enlargements, this glandular debility appears evidently to consist in an attempt of nature to shut up the smaller or lymphatic series of vessels. In them it is clear the natural decay of the constitution must first take place, and this decay will most readily occur, where their structure is most complex, or in their glands being particularly favoured by external injury at this time. The evidence of this general predisposition to decay in the glandular system, will appear undeniable, when we reflect on the cause of the disease, which is much oftener than otherwise, unknown; on the appearances in the ultimate progress, when several parts, often the whole system, is found to acquire a similar state with the original affection, although it has never passed the stage of scirrhus, to endanger absorption; and lastly, on the extirpation of the affected part being, in almost every case, so soon succeeded by a return of the disease, either in the same situation, or elsewhere. To these facts we may add the weak low pulse, which always attends the disease, the slow state of bowels which is observed so characteristic of this malady, evidently marking a want of energy in the system; and also the small tendency to cancer which similar glandular affections of the female breast display, when occurring during the period of childbearing, and when no such decay of the system is conspicuous.

"The great and leading indication, then, that presents in this disease, is to counteract the deficient energy of vessel, and the consequent occlusion of it that this deficient energy is apt to induce: for this purpose a general increased action of the lymphatic system must be produced, both to prevent the progress of the affection, and to reduce to a state of suppuration the parts already diseased. That this is what is required,

we

we find confirmed by the late collection of cases of Professor Richter. From the observations of this intelligent practitioner, it appears plain, that wherever there was some degree of fluctuation in a scirrhous tumour, and some fever and inflammation along with the pain, a favourable termination always took place. To produce these symptoms, then, our practice must be directed, and that by means of such remedies as act alone, or chiefly, on the lymphatic system, bringing their action to that exact point which is capable of exciting this fever and suppuration: the Professor remarks—in doing it, however, much nicety, and an appropriate selection, is required. If the indication is carried too far, instead of effecting a cure, ulceration and all its consequences will ensue. I would again and again enforce, that the leading action of all remedies here, is their excitement of the lymphatic system alone, not of the large vessels, and the prominent part of the treatment must be directed to this view. As answering this purpose, a variety of remedies have been employed by different practitioners, and at times with success, but the success has been only occasional, forming a random cure, and has not been directed by conviction of what is necessary to counteract the real morbid state which cancer exhibits.

"With respect to the discharge in cancer, whatever its peculiar nature may be, it seems a consequence, not a cause of the disease. Dr. Adair Crawford, presuming on the state of the fluid, as a cause, tried experiments, with a view to decompose it, and render it innoxious; but his attempts here failed, and could be of little service in the treatment.

"From the facts now delivered, the constitutional nature of cancer must be admitted, and that it can alone be properly attacked by constitutional means. The continuing the whole system of lymphatics, free and permeable, is the point to be aimed at, as well as removing that premature annihilation of their structure, which has already occurred in the diseased part. Hence extirpation, though it remove the diseased part,

yet by the destruction of the lymphatic system it occasions, induces in the contiguous parts the same tendency to annihilation, and that more powerfully than if it had not taken place, while the consequences of the operation at the same time strengthen the general predisposition of the habit to the disease.

"Thus we have seen by a review of the two diseases of scrofula and cancer, that the lymphatic system of vessels or glands, is threatened with annihilation, more or less general, at two periods of life, under very different morbid circumstances; in youth, the circulation is obstructed by a lax incohering solid, deficient in energy from a fault of its constituent parts, as well as of its circulating contents.

"In age the vigour of the solid is lessened, but without any fault of its constituent parts; and a general defect of energy to carry on the minute circulation of the system takes place; so that the occlusion or death of these small vessels, on the least injury of the part, is apt to ensue.

"I have thus shortly illustrated the principles which I conceive should direct a successful practice in the treatment of scrofula, and its various modifications, as well as of cancer.

"That a *certain plan* of treatment, founded on the principles I have laid down, will succeed in the cure of scrofula and cancer, much experience has convinced me; and to acquire this experience, many thousand attempts I have found necessary, before attaining its present perfection: in stating this, it would be equally impolitic and disingenuous to do it with greater confidence than it deserves.

"But though principles are thus laid down, and though prescriptions are applied, yet the same treatment, it is well known, will often fail in one hand that succeeds with another in the very same disease; and that depending on their different acquaintance with the disease, and its particular modification in different individuals. It is this intimate acquaintance with a disease which gives a species of knowledge that cannot be communicated by words, and, at the same time, points out,

in

in the exercise of medicine, the necessity for a more circumscribed line of practice than what is generally pursued, in order to attain this knowledge, and consequently acquire a decided success in the treatment.

" In the constant routine of medical practice, where a practitioner is daily distracted with twenty or thirty different diseases, can the same success in their treatment be expected as where his attention is devoted solely to one or two? —That the leading principles of treatment may in most cases be pretty well understood, I am far from denying, but there is, besides this, a minutia of practice, which only frequent applications to the same disease, and frequent opportunities of inspecting and comparing all the variety of morbid circumstances it exhibits, can give. This no general practitioner can ever completely attain, and in no part of medicine will this doctrine be found so perfectly verified as in the treatment of ulcers: hence we often find in this department of practice an old woman succeed, when the first abilities of the profession have been foiled! The dwelling on particular objects, it is well known, makes them appear in a very different light from what a superficial inspection creates; and the daily observation of the same subject leads at last to an intimate acquaintance with its nature, which can never be acquired by accidental and cursory views of it. It is from a plan such as here pointed out, that future improvements in practice are chiefly to be expected. The advantages of it in diseases of the eye, and the teeth, and even in the treatment of venereal complaints, have been long conspicuous. The powers of the human mind, whatever the overweening pride of mankind may assert, are but limited; and to excel in one department, is as much as generally falls to the lot of an individual. Yet the desire of man is constantly to grasp the extent of science, and by reducing every thing to general principles, to abridge the labour of investigation: this is particularly the foible of the present day. To simplify knowledge in every department, is the anxious

anxious wish of the votaries of science. In medicine however we may observe, that no system-builder has ever succeeded at the bed-side; and the first abilities of the scientific physician are often outdone by the plodding, experienced apothecary, who is anxious only to mark effects, without investigating their causes. I deal in no secret, and I know of no specifics. It is the proper combination of the means already known, and a full acquaintance with the diseases, that forms the real source of success."

From the quotations we have given, our readers must perceive, although the Doctor professes not to deal in any "*secret*," that he nevertheless employs a "*peculiar*" mode of practice, "*a certain plan*" of treatment, which he has thought proper to conceal. At present, therefore, we shall only add, that as no attested PERMANENT cures have been made public, and as we cannot learn that the author has yet evinced the superiority of his method "to the satisfaction of the faculty at large," we are obliged to suspend our judgment concerning the value of his labours in this department of medicine. If he *really* treats cancerous complaints with success,—a just feeling of his duty to suffering humanity, and a regard for his own character, must soon impel him to publish so useful a discovery.

---

ART. VIII. *Dissertations sur les Fièvres pernicieuses ou ataxiques Intermittentes.* Par J. L. ALIBERT, Medecin, et Membre de plusieurs Sociétés savantes. Octavo. RICHARD, Paris. 1799.

IF we were to say to those who look on medicine as a science absolutely conjectural: "This is a disorder which comes on suddenly, shews itself by a train of dangerous symptoms, to which succeed long intervals of deceitful calm; that, in a few days, it constantly destroys those who are attacked by it, unless its progress be stopped in time, by pursuing those means of which experiments have confirmed the efficacy:"—these detracters would

would be then compelled to confess, that, in this case at least, their reproaches were unjust; that in the treatment of this disorder, at least, physic equals in certainty those other parts of human knowledge which are supposed to be fixed on the most solid foundations. The treatise which M. Alibert has published on intermittent atonic fevers, more generally known under the name of malignant intermittents, supports the justice of these remarks.

Has this disorder completely escaped the observations of the ancients? Does the honour of the discovery belong exclusively to the moderns? Many authors have boldly pronounced in the affirmative. In so delicate a question, if we abstain from giving a decisive judgment, let us, at least, confess, that the opinions transmitted to us by the ancients, respecting these kinds of fevers, are very imperfect, and that they were quite uninformed of their danger, since an aphorism of the father of physic declares, that no intermitting fevers are dangerous.

As soon as the discovery of the new world had put physicians in possession of a specific remedy, their endeavours were crowned with success. The cinchona in the hands of Morton, and particularly in those of Torti, became a certain mode of cure. The latter, in a work published about the beginning of this century, communicated the valuable results of a long and enlightened practice. Since his time scarcely any author has treated this important matter, *ex professo*. Many physicians, among whom may be distinguished Werlhof and Senac, have left materials towards forming a more complete history of this disease. But, as M. Alibert observes, "we may still add to their discoveries, and dispose the facts they have collected in better order." By fulfilling this difficult task, he has placed himself in the honourable rank of those who have contributed to the improvement of the medical art.

The division of malignant intermittent fevers into seven classes is preserved. We find them all clearly described in their different periods, from their first approach to their termination;

mination: the choleric, marked by bilious vomitings, or stools of the same nature: the atrabilious, which differs little from the former, but whose marked symptom is a bloody flux: the cardiac, in which an intolerable pain is felt towards the epigrastic region, accompanied with nausea and vomiting, which, however, do not afford any essential relief: the diaphoretic, so called from the abundant and periodical perspirations, which much weaken and exhaust the patient. The English sweating sickness described by Mead, *(hydronosas Foresti,)* and in which an excessive perspiration sometimes carried the patient off in twenty-four hours; the fevers called *élodes* by the ancients, in which the patients often died exhausted by perspiration, which continued for many days, and may be classed, in some respects, with the malignant diaphoretic intermittent; but which is distinguished from it by the continuance of the perspirations, and by the inefficacy of the cinchona in its treatment. In all these affections, and particularly in the first, which many nosologists have classed in the number of pestilential maladies, is the action of the cutaneous organ increased or diminished? All physicians have hitherto believed in a complete atony.

The history of the syncopal intermittent, so easy to discover; that of the *algede*, whose leading symptom is a chilling cold, at first confined to the feet and hands, afterwards advancing to the body; that of the soporific, more frequent than any of the others, and which is distinguished from apoplectic affections, by the intervals between the fits, terminates the exposition of fevers observed and described by Torti. To the seven species admitted by that illustrious observer, M. Alibert has added an eighth, to which he gives the name of delirious, because a delirium characterizes the paroxysms. This species, of which the physician of Modena had some slight knowledge, has been established by observations made at the national hospital of the Salpétière. Future researches will produce, without doubt, discoveries of some others which are

analogous,

analogous. In the 79th volume of the Philosophical Transactions, for 1758, there is the history of a febrile and intermitting delirium, in which the administration of the cinchona was followed by a complete return of health.

Is the presence of the predominating symptoms sufficient to establish a distinct species of fever? Our author thinks justly that they ought to be considered only as constituting varieties; and he grounds his opinion on the identity of the causes which produce them, on the means of combating them, and on their succeeding each other, in cases where the patients have experienced a relapse. In confirmation of this opinion, it may be observed, that these eight principal symptoms are not always present in the dangerous intermitting fever. We see its access marked by violent cephalalgies, pleurodynies, universal and partial spasms, nephritic and intestinal colics, general and local palsies, and by attacks of epilepsy.

After having described those intermittents which take on them the character of tertians, or of double tertians, M. Alibert makes some observations on the remittent fevers, or those whose type approaches that of the continued fevers. He next treats of fevers reigning epidemically, and attacking a great number of individuals at the same time. The works of Lancisi, Richa, Rammazini, and the medical collections of Breslaw, supply him with most remarkable cases of this kind. These fevers are not contagious, and if they attack a great number of persons, it is only in consequence of their being at the same time exposed to the causes which produce them.

The author points out the different symptoms by which we may distinguish the fever he treats of, from those that are analogous to it—these are the benign intermittent, the adynamic, and the continued ataxic: he then shews the signs by which they may be known, and by which we may judge of the degree of danger accompanying them. The efficacy of the means whereby they are combated, renders the prognostics little to be dreaded, notwithstanding the formi-

dable appearance of their symptoms; at least, if the disease is not too far advanced, the fits having but a very slight remission, and each paroxysm growing worse than the other, so as to leave little opportunity for administering the bark.

The influence of marshy exhalations in producing intermitting fevers, observed by Torti, near the lakes of Lombardy, and by Lancisi, in the Pontine marshes, have been confirmed by the later observations of Zimmerman, made on the borders of the lakes of Switzerland, and by those of Lind, published in his account of the "Diseases of Europeans in hot Climates." Most of the women admitted into the infirmary of the Salpétière, attacked by intermitting ataxic fevers, inhabited that part of the hospital adjoining to the river of the Gobelins and the common sewer which runs into it; consequently they were exposed to the pernicious exhalations which rise from that infected channel. Among a great number of corresponding facts, which might be adduced in support of this opinion, the author contents himself with citing the following: The city of Montpellier is naturally divided into two parts: one, situated towards the sea, receives the winds that blow from it, but which do not reach the city before they have swept the surface of the salt marshes, and the numerous ponds on the borders of the sea. Physicians have observed, that intermitting fevers become endemial in that portion of the city, and the disorders in general more untractable.

The seasons of summer and autumn, the night-time, the action of the winds, weakness arising from antecedent causes, and not being accustomed to them, all favour the operations of these marshy miasmata. Ponds situated in elevated places, those which do not receive the putrescent remains of animal or vegetable substances, and those whose muddy bottoms are commonly covered with stagnant waters, have a much less pernicious influence on the production of dangerous fevers. It is not known in what time these vapours occasion fever; still less in what manner they act in producing this effect.

Some

Some propositions, observations, and experiments, are given by the author, with the view of ascertaining these facts.

That part of the philosophy of inanimate bodies to which the name of eudiometry is given, (i. e. the measuring the purity of the air,) is far from being brought to perfection. We have only learnt the relative quantities of oxygen and of azote contained in the atmosphere. Numerous unrespirable gases, and poisonous vapours, which the air holds in solution, have hitherto escaped our notice. But the purity of the atmosphere does not depend so much on the relative proportion of oxygen and azote contained in it, as of the deleterious and other substances of which those gases become the vehicles.

A comparative analysis of air taken on the borders of the lakes in Lombardy, and from the summit of the Alps, does not give any remarkable difference; or if there is any difference, it is entirely in favour of the marshy air: yet there can be no doubt but the air of the mountain is the most salubrious. Those who breathe it enjoy a good state of health, seldom interrupted by dangerous diseases; while those who inhabit the marshy plains of Italy, are, for the most part, pale, wan, deformed, and only drag on a languishing existence.

If then the degree of salubrity in the air is not in proportion to the quantity of oxygen it contains, we must carefully examine the water dissolved in the atmosphere, and loaded with the different emanations that arise from the places where it is evaporated. With this view M. Alibert proposes a new instrument, not dissimilar from that used by the academy *del Cimento*, to measure the degrees of the humidity of the atmosphere. It consists of a hollow cone or cylinder, filled with ice, and placed on a cistern destined to receive the water which condenses on the surface of the tube, it being colder than the air which holds it in solution. This accumulated water may be submitted to chemical analysis, which will probably discover the nature of the substances united with it. This kind of hygro-eudiometer employed in a medical analysis of

the atmosphere, promises more useful discoveries than any of the numerous methods hitherto proposed.

From the theory of marshy emanations, the author passes to the treatment of other fevers of which they are frequently the cause. The evidences of judicious observers agree in allowing, that the cinchona is the only efficacious remedy against those fevers.

The author, towards the end of his work, gives an ingenious emblematical figure expressive of the power of the cinchona. A symbolical tree is depicted, on the branches of which are disseminated the names of the numerous kinds of fevers which are cured by its bark: each destructive species seems to adhere to the preserving trunk. Those dangerous diseases, doubtless, call most imperiously for its application; but the method of administering two ounces between the paroxysms, when the fevers intermit, or towards their decline, when they only remit, seems to be too generally recommended. By modifying this practice, might we not avoid the dangers which are incident to the sudden suppression of fever?

The method adopted at the Salpétière, by Professor Pinel, seems to lead us safely to that happy point. His method consists in the employment of this febrifuge in doses too small to suppress the fever suddenly, but sufficiently large to change its pernicious character, and convert it into a simple intermittent; it may then be left to subside of itself, or the efforts of nature may be assisted by less active medicines.

This gradual process, pointed out by Werlhof, seems particularly adapted to fevers which are produced by slight causes; and which are accompanied by less alarming symptoms. In this case Pinel has even substituted instead of the bark of the cinchona, bolusses made of the powder of gentian, flowers of chamomile, and syrup of honey.

When, in the exercise of our art, we imitate the exact process of geometry, we may be allowed to borrow its language. These, doubtless, were the reasons which induced M. Alibert

to

to give the title of practical *theorems* to twelve rules, in which he has included every thing known on the most advantageous manner of administering the cinchona. In a very extensive note, he examines this bark by the different tests of botany, chemistry, and pharmacy. Lastly, he concludes every thing relating to the treatment of ataxic intermittents, by pointing out such circumstances as may discover any complicated indications. Imminent danger of death; a particular state of the stomach, which forces it to reject the bark immediately after it has been taken; a manifest tendency to adynamia; a disposition to plethora, or to generate vermin; these are the circumstances which require the aid of secondary medicines, to assure the operation of the primary.

In works of reasoning, (said one of our most profound metaphysicians,) it is only by making a just arrangement of his materials that an author is enabled to perceive what he has omitted, and those things which he has not sufficiently considered*. M. Alibert seems to have felt the importance of this precept; for, we may remark, among all the parts of this dissertation, that connexion, that reciprocal and harmonious dependance of ideas, which prove that he has talents to embrace the whole extent of his subject.

With respect to the style, those, who by perusing his former works, know with what art he strews the flowers of eloquence, will perhaps be astonished not to find in the present work, that brilliant colouring with which he animates whatever he describes. This prudent reserve shews he possesses a deep knowledge of an art so difficult to attain, that of being able to explain his ideas by the most suitable and appropriate terms. The talent of accommodating his style to the nature of the subject on which our author treats, ought to be peculiarly appreciated at a period when the only rule some writers seem to observe is, not to confine themselves to any.

* Condillac, Essai sur l'Orig. des Conn. Hum.

ART. IX. *Principles of modern Chemistry, systematically arranged.* By Dr. FREDERIC CHARLES GREN, late Professor at Halle, in Saxony. Translated from the German; with Notes and Additions, concerning later Discoveries, by the Translator, and some necessary Tables. Illustrated by Plates. 2 Vols. Octavo. CADELL and DAVIES, London. 1800. Price 16*s*.

THE present work is an abstract, made by the celebrated Dr. Gren himself, from his estimable System of Chemistry; and is intended, not as a mere skeleton or outline of that performance, but to form a regular and complete introduction to this science. The principal experiments, and fundamental doctrines, have, therefore, been circumstantially described in the present work. Some parts, however, of the vegetable and animal kingdom, more interesting to the physician than the public at large, have been rather shortly treated of; but they have been explained in a very ample and masterly manner in the second volume of his System of Chemistry. Besides, the author declares that his chief attention, in writing it, was bestowed on the practical use and application of chemistry. For this reason he has introduced a number of valuable matters relating to pharmacy, arts, manufactures, and the operations of common life; such as the making of glass, pottery, enamelling, making of sugar, starch, the art of dyeing, bleaching, making of wines, brandy, beer, vinegar, baking of bread, production of nitre, refining metals, &c.

The translator observes that Dr. Gren, at the time he wrote the original, "had renounced the atomistical system of natural philosophy, which, in latter times, has been extended to great subtleties by Le Sage and De Luc; and that, in its stead, he has adopted the dynamic system, illustrated by Kant in his Metaphysical Elements of Natural Philosophy. According to the former, 1st, matter fills its space merely by its existence; 2dly, it is absolutely impenetrable; 3dly, its division can be carried to a certain length only, ending in atoms, which, though

though extended, are not farther divisible; 4thly, there are empty interstices between the atoms; 5thly, the particles of elastic fluids, as air, vapours, caloric, &c. do not touch each other, and consequently they form what is called discrete fluids; 6thly, the rarity or density of a body depends solely on the quantity of empty interstices in a certain volume of space occupied by the matter constituting that body. On the other hand, according to the dynamic system, matter fills its space by its primitive powers of attraction and repulsion; its impenetrability is only relative; it is divisible in infinitum; it fills its space as a continuum, or with continuity, so that the objective vacuum is a mere imaginary being, consequently there are no discrete fluids, and even the particles of caloric and light form a continuum; lastly, the greater or less density of a body is only an expression indicating the greater or less intensity of the primitive, attractive, and repulsive powers; which constitute the nature of matter, and which must decrease together with the extension of a certain body, according to certain laws; and therefore matter is supposed, even at the greatest rarity or least density, to fill its space with continuity.

"From these tenets of the dynamic doctrine, the expressions continuum, continuity, discrete fluids, &c. not used in this country in that sense, occur in the earlier part of the present book, which the translator could not suppress without altering the sense of the text.

"Besides, it is well known, that, in the System of Chemistry quoted above, the author did not so much adhere to the old phlogistic system, as was objected by some, but rather that he has framed a system of his own, which he called ecclectic (mentioned in his work, § IX. Introd.) though he there explains every phenomenon, not only according to his own doctrine, but also historically, according to that of both the phlogistian and anti-phlogistian philosophers. To that ecclectic system the author adhered to his death; but in the present

present work Dr. Gren has merely stated the grounds of his favourite chemical creed, and continued throughout the rest to explain all the phenomena treated of according to the modern *anti-phlogistic system* in the strictest sense."

The translator professes to have given the meaning of Dr. Gren as literally as the two languages would allow. He says "he has taken no liberties with his author; only, in a very few places, he thought proper to transfer a line or two from the author's own larger book, or in notes, besides a few of his own, marked *Ed.*—He has also studiously retained the references in the §§, or rather increased their number, in order to assist the recollection of the reader.

"Since the German publication of this work, some valuable discoveries have been made in the science. All of them do not come within the compass of an elementary treatise. Such as may have been occasionally added in notes, are distinguished by *Ed.* from those of the author. The new earth, glucine, or rather glycine, the two new metals, tellurium, or sylvanite, and chrome, have been added in the text in their proper places.

"With regard to terminology, the translator has made use of the new nomenclature, as proposed by the French chemists, and translated into English, under the title, 'Method of Chemical Nomenclature, proposed by De Morveau, Lavoisier, Berthollet, and Fourcroy.' Translated by James St. John, M. D. 8vo. London, 1788.—Well aware of some inaccuracies observable in that Nomenclature, and of the improvements that might be made in it, he thought it more reasonable to keep, as it were, to a certain standard, now almost generally adopted, than to fall into the fashionable mania of fabricating or adopting new terms. For if we go on, as some of the learned in this and other countries do, there is great danger that, after ten years, no chemist will understand another." The translator, we perceive, has deviated sometimes from the established orthography; but he has, in general terms, assigned his reasons for taking this liberty.

Six

Six elegant plates, representing the most useful chemical instruments; and a seventh, exhibiting specimens of the new symbols used in this science, are subjoined to the translation, although not occurring in the original. At the conclusion, the translator has also added some matters which cannot but be acceptable to the reader. They relate to the tables of affinities, the new chemical symbols, the specific and absolute gravity of bodies, the comparison of Fahrenheit's with Reaumur's thermometer, of the former French measures and weights, and of the present metre, litres, and grammes, recently adopted in France for measures and weights, with the English. Lastly, a small chemical library is added. To render the translation still more complete, we here have an extensive and convenient index, which may serve instead of a compendious dictionary of the old and new chemical nomenclatures.

Upon the whole, this elementary work will be highly useful to the student, as it contains many new hints and improvements, which an experienced chemist will easily discern on the perusal. We must be permitted, however, to observe, that several of the author's opinions are likely to be rejected or controverted.

---

ART. X. *Medicinische Ephemerides von Berlin, &c.*; i. e. *Medical Journal of Berlin.* Edited by D. L. FORMEY, Physician to his Prussian Majesty, &c. Vol. I. No. 1. Octavo. 213 pages. NAUKSCHE, Berlin. 1799.

THIS Journal is intended to comprehend—Observations on the weather; accounts of prevailing epidemics; remarkable cases of disease, surgical operations and dissections; lists of the births and deaths in Berlin; notices concerning the state of medicine and surgery; with occurrences in medical police and forensic medicine.

The present number contains, I. *State of the Weather in the*

*Year* 1797, *with Observations by the Editor.* The reader is first presented with accurate observations on the weather, barometer, and thermometer; 2dly, With lists of births, marriages, and deaths, specifying the diseases which proved fatal. In the year 1797, the births in Berlin were 6235 more than the deaths, and in the Electorate of Brandenburg 28,227; consequently in Berlin 825, and in the Electorate 6852 more births than deaths. As the population of Berlin is computed at 164,978 souls, more than 1 in 20 was born in the course of the year, and only about 1 in 30 died—certainly a very uncommon proportion in a large city. The small mortality was probably owing to the absence of epidemic and contagious diseases. Amongst the 6235 births, 381 were still-born infants; and 1239 died within the first year of life: a melancholy proof, that, even in a healthy year, the fifth child dies within the twelvemonth; which is, undoubtedly, to be ascribed to improper management in the early period of infancy.

II. *Case of the late King of Prussia, by M. Rhode, Surgeon to his Majesty.* The principal circumstances of this case are already in the hands of the public; the present account of it is very circumstantially and judiciously drawn up, but does not admit of an abridgment. We shall only mention, that the king, notwithstanding his robust habit of body, had early in life been subject to fits of fainting, and that his premature death was probably accelerated by faults in diet, and an improper use of medicines (as in one part of his life he was for a long time in the habit of taking the absurd compositions known by the name of *sal naturale* and *aurum potabile.*)

III. *Medical Police.*—1. Report of Professor Reil on an epidemic said to be very fatal in and about Leipzic, which he proves to be an unfounded rumour. 2. On a new remedy for the epidemic of the cattle, *(Viehseuche.)* This remedy is powder of charcoal, which was first proposed by Dr. Bæhrens. One experiment made, in order to ascertain its efficacy, did not succeed; but the College of Health (Sanitæts Collegium)

has ordered the experiments to be farther prosecuted. 3. On the unwholesomeness of the flesh of calves killed a few days after birth.—Intelligence has been collected on this subject by all the provincial medical colleges, which uniformly tends to prove, that no detrimental consequences are to be apprehended from the use of it. The Reviewer, however, is of a contrary opinion, and believes with Frank, (in his "System of Medical Police,") that such food can only be used with safety by persons whose powers of digestion are very vigorous, as on account of its insipidity, and the little nutrition it affords, it is very apt to load the stomach. 4. On houses for depositing the dead, amongst the Jews.—Some years ago, a number of patriotic Jews having formed an association, under the name of the "Friendly Society," resolved, among other things, to endeavour to get the custom, prevalent among the Jews, of burying dead bodies too soon, abolished; and as a committee, appointed for this purpose, had agreed, that the most effectual remedy for that abuse would be, to erect houses in which the dead bodies might be deposited, they published a plan, inviting their brethren to concur with their intentions. Many Jews were hereby induced to join the society; but still the majority remained obstinately attached to their *orthodox* prejudices. The society, however, persevered in their benevolent exertions. At Breslaw, upon occasion of a Jewish infant having been buried almost alive, the magistracy addressed a serious rescript to the Jews, with a view of persuading them to relinquish their prejudices, and erect similar receptacles for dead bodies. This was followed, March 6, 1798, by a letter from the General Directory, (General Directorium,) addressed to the provincial elders (Oberlandes Aelhesten) of the Jews, in which they are called upon to adduce whatever reasons they expected to find either in the Old Testament or in the Talmud, whether against the pernicious custom of early burial, or against the passing a decree of police for its total prohibition. 5. A decree, whereby the Christmas presents of the apothe-

caries to the physicians are to be abolished in all the Prussian dominions. 6. The form of an oath, which every practising physician is required to take by a decree of the Royal Upper College of Physicians.—It runs thus: "I, N. N. swear, &c. that in consideration of my having been appointed and admitted as practising physician, at ———, I will perform my duty towards all patients to whom I am called, with conscientiousness, diligence, and perseverance; that I will not refuse my assistance to any person who desires it; that I will assist the poor with advice and prescriptions *gratis*, and not impose exorbitant charges upon my other patients; but on the contrary, whenever I am required to deliver in an account, I will strictly conform to the established rates; when I am called to attend a patient, together with other physicians, I will appear without hesitation, assist at their consultations according to the best of my judgment, and dispassionately submit to perform my share of the medical attendance; and, in general, I will comply with every duty prescribed to practising physicians by the Medical Ordinance, and all other decrees passed, or to be passed, by the College. So true, &c. &c." 7. Regulations, to be henceforward observed in examining physicians, surgeons, and apothecaries, who are about to enter into practice.

IV. *Biography of the late Dr. Moehsen, Physician to his Majesty*, a man eminent for his skill in practice, his extensive learning, and his literary productions.

V. *Forensic Medicine.* Three reports upon infants found to be dead soon after birth. Two juridical cases of suffocation, by Professor Behrends, of Frankfort on the Oder. These cases are very interesting, on account of the importance of the questions here agitated; namely, whether the suffocation was produced by internal or by external causes; and whether it was effected by the act of the deceased himself, or by other persons. They are treated with great ingenuity, science, and discrimination.

*Bibl. der Prak. Heilk.*

ART.

ART. XI. *Appendix to a System of Dissections, Part First; containing additional Descriptions of the abdominal Muscles.* By CHARLES BELL, Fellow of the Royal College of Surgeons. Folio. 6 pages, and one engraving. MUNDELL, Edinburgh. 1800. Price 2*s.* 6*d.*

WE have already noticed the preceding parts of this work. (See *Lond. Med. Rev.* N° I. V. X. XII.) The author here presents us with an additional plate of the interior abdominal muscles, &c. drawn from a very strong and well-proportioned subject, which had been dissected for public demonstration.

---

ART. XII. *Journal für die Chirurgie, &c.* i. e. *Journal for Surgery, Midwifery, and forensic Medicine.* By J. CHRISTIAN LODER, Physician to the Duke of Weimar, and Professor of Physic in the University of Jena. Vol. II. Part I. Jena. Octavo. 202 pages. 1798. Imported by GEISWEILER.

THE contents of this Journal appear to us so very useful and interesting, that we think our readers will be much gratified by presenting them with an analysis of the numbers as they shall in future appear. To go back to its commencement, would be to break through the regulation we adopted concerning the date of the works we intended to review. It will easily be understood, that in a periodical publication containing the productions of many correspondents, there must be a considerable difference as to the merits of the subjects, as well as the manner of treating them; we hope, therefore, not to stand in need of any apology for greatly abridging some of the papers, and giving a full account of others.

1. *Observations on a foreign Substance in the Rectum.* Extracted from a Letter of Professor SCARPA to the Editor.

"A countryman, 28 years old, of a very costive habit, suffered so much one morning (6th May, 1797) from constipation, that

that he was induced, after many severe but fruitless efforts, to introduce a small piece of stick into the rectum, in order to assist himself. In this manner he emptied a portion of the rectum. The ease and success of the trial encouraged him to introduce it still deeper.

" He proceeded pushing the instrument further into the intestine; but unfortunately, he knew not how, it escaped from his fingers, and slipped entirely into the gut. He attempted several times to extract it by the fingers, but in vain. He raised himself up, and forced himself as if at stool, until he was quite exhausted, but without success. Upon introducing his finger again into the rectum, he discovered that the rod had ascended, for he could not now reach its lowest extremity. As the pain was at that time very trifling, the man went to work again in the field; but in less than an hour after he was seized with violent pain in his bowels, without nausea. The pain was particularly sharp in the region of the right inguen, where an elevation appeared, and where the extremity of the stick could be distinctly felt. The patient retired home, and kept his bed the whole of the remainder of that day and the following night, without calling in any aid. As the pain was less the next day, he got up and walked to Pavia, a distance of about four Italian miles, in order to consult a surgeon. The surgeon introduced a pair of forceps into the rectum, but although he pushed them up as high as possible, he could not reach the stick. He therefore advised the patient to return home and drink a good deal of oil.

" On the 9th of May, as he remained exactly in the same state, he was brought to the hospital. I caused him to lie on his back, and examined him in presence of all the pupils. I discovered the extremity of the stick near the spine of the right os ilium, and could almost grasp it with my fingers. I introduced a pair of long pincers on my fingers into the rectum, but could not discover any thing by this means. The patient did not complain of any pain in consequence of this trial.

" As

" As the pulse was hard and full, the countenance flushed, and skin very hot, I ordered the man to be blooded, and to drink an oily mixture containing a solution of purging salts; also to have a glyster administered every three hours. He was to be allowed *polentia* *, or a little flour boiled in meat soup, which he ate with pleasure.

" Towards evening he had a copious evacuation by stool, of fragments of indurated fæces, and a great quantity of liquid materials; but the stick did not move.

" To my great astonishment, I discovered the next day, that the substance occupied the left side instead of the right: about eleven o'clock the pains began to cease, and it ascended into the left colon. It was distinctly felt in the left hypochondrium, and appeared to be taking the road of the great arch of the colon. About one o'clock it was felt near the pit of the stomach, and at two it projected from the right hypochondrium. I knew not what to do, and thought of making an opening into the gut, but resolved to wait until the stick reached the cœcum. This happened at five o'clock in the afternoon, and it then occasioned the patient much uneasiness and pain, but he asserted that it was moving back again. About the middle of the night, as I was informed, he perceived it at the pit of the stomach.

" About eleven o'clock the next day it was again felt in the left groin. I then advised the patient to get up and press the stick downwards very gently with his hand. At noon it had passed nearly to the right side. The patient was then placed by me on the edge of a bed; his head, and body, and legs, were raised exactly in the same manner as is required in the operation of lithotomy. In this position I introduced a finger into the rectum, and afterwards a thick catheter of elastic gum. By means of this instrument I discovered a faulty deviation of structure in the rectum. It formed a blind sack

* A kind of hasty pudding, composed of the maize or Turkey corn.

on

on the left side, from which the catheter passed immediately to the right. The instrument was pushed as high up as possible, and by means of dexterous pressure on the outside of the abdomen, and the assistance of the catheter and its leaden probe, the substance was brought so slow down into the pelvis, that I could touch it with the middle finger. By the help of a pair of forceps for extracting polypi, the extraneous body was brought away. (From an engraving, which is annexed, it appears that this stick was eight inches and a half long.)

"The patient complained of pain in the left side soon after the operation, but no blood was voided by stool. A glyster of milk, with three grains of opium dissolved in it, was thrown up, and a cataplasm applied externally; but these did not afford much relief. The pains increased towards evening, and a fever ensued. He was blooded, and put into the warm bath. The next day there was a return of pain, for which the bath was again ordered. It was repeated for two or three days after, when the patient was gradually restored to health."

2. *Extirpation of a scirrhous Tumour of the Tongue.* By Dr. Danzman, of Lübeck.

The tumour alluded to occupied the right side of the tongue; it was about an inch and a half in length, and one inch in breadth, and was situated very near the tip of the tongue. In the middle of the tumour were two openings, about a quarter of an inch distant from each other. These had only appeared the day before the Doctor saw the patient, and were evidently much larger the following day. On the third day the space between them was completely ulcerated. A few weeks previous to this, the patient first began to experience sharp shooting pains in the tumour, which was of about six months standing.

Dr. D. determined to extirpate the tumour, as the only probable way of saving his patient's life. The operation was performed in the following manner: a piece of round wood was put between the jaws, the tip of the tongue was taken hold of on the left side by a pair of polypus pincers covered with flannel,

flannel, and was pulled forward and held fast. An incision was then made from behind forwards, the whole length of the tumour, and at the distance of a straw's breadth from it. Having made this incision, the surgeon took hold of the tumour, and making a similar incision on the inferior surface, he extirpated it. At first the blood sprang out with force, but it soon became inconsiderable; so that the disagreeable necessity of applying the actual cautery, which had been resolved on, was done away.

Presently after the operation, a seton was introduced in the back part of the neck; the mouth was kept clean by means of a gargle composed of honey and lime-water; a very low diet was directed for the first eight days; but he was afterwards allowed a fuller diet. In five weeks the wound was quite healed.

3. *Two Cases of successful Extraction of Polypi Nasi.* By Professor FRITZE, of Herborn.

It is not easy to convey a distinct account of these two cases without the assistance of the plates, which represent the forceps and other instruments that were used. In both cases the polypi were of uncommon magnitude and extent. In the first case, the bones of the face and nose were separated by the fleshy tumour; which not only appeared outwardly at the nostril, but also filled the upper part of the throat. Several portions of this tumour were extracted at different times by means of curved forceps; and those parts which could not be reached, were made to suppurate by repeated applications of the actual cautery. A great deal of difficulty and inconvenience arose from the weak state of the patient, and the loss of blood he sustained during each attempt to pull away the tumour; but by means of tonic remedies, and allowing proper time to intervene, all these obstacles were at last overcome.

In the second case, the tumour was very large, ulcerated, and so offensive that it was impossible to remain in the same room with the patient. This tumour was at first attempted to

be pulled away by forceps introduced into the nostril; but as the surgeon did not succeed thus, he laid hold of the tumour behind the palate, and by means of one forcible effort brought the whole away, the tumour having adhered by one fleshy root only. "This tumour was as large," says Mr. Fritze, "as a moderate sized rat."

4. *Method of curing Distortions of the Spine.* By Dr. Wichmann, of Hanover.

The method here recommended consists in causing the patient, in whom symptoms of incipient spinal distortion begin to appear, to lie almost constantly in a horizontal posture during a very considerable length of time. (For a description of these symptoms, which the practitioner is often greatly at a loss to account for, Dr. Wichmann refers to Coopman's Diss. de Cyphosi, Franeq. 1770, and Van Roy's Commentatio de Scoliosi.) After the distortion of the spine has actually taken place, this method is only efficacious in checking its farther progress. Glisson's method of suspending the patient by the arms and head, though depending upon the same principle, (namely, the prevention of the pressure of the vertebræ upon each other, whereby the centre of gravitation becomes constantly more and more deranged,) cannot prove equally effectual, as it cannot be continued for a sufficient length of time. Darwin's proposal (in his "Plan for female Education," 1797) to lay the child, in whom a tendency to distortion of the spine appears, upon its back, for the space of one hour every day, is likewise insufficient.

The author relates the case of a youth, who was attacked, in his 16th year, with pulmonary complaints, which gradually left him; upon which, though till then he had been of a slender well-proportioned growth, a considerable deformity of structure appeared about the thorax. In the course of a twelvemonth his lower extremities became by degrees very much debilitated, till at length he almost entirely lost the power of walking. He complained of no other pain than a

dull sense of tension in both legs, extending downwards to the upper part of the foot, which rendered him unable to lay one thigh over the other when sitting. He had no pains in the hips or pelvis, nor any other symptom that could indicate the presence of the cause mentioned by Pott, as occasioning the paralytic state of the lower extremities. From an idea that the symptoms might possibly be owing to a sciatic rheumatism, blisters, and afterwards moxa, were applied to the hips and thighs, and a diaphoretic course prescribed, but without effect. A compression of the spinal marrow in general, and particularly of the great sympathetic nerves, was then supposed to be present, for which two setons were applied between the upper vertebræ of the spine and the scapulæ. These seemed at first to produce a speedy amendment; but the symptoms soon became again as bad as ever. Even in the recumbent posture the patient could not raise his legs, much less support himself or walk with them. Dysuria, and sometimes a total suppression of urine for several hours, were frequent concomitants of this disease. Corroborants, with the external use of turpentine, produced a temporary abatement of the symptoms, but they soon returned with as much violence as ever. At length the use of all other remedies was given up, and by a confinement of half a year to his bed, with no other intermission than that of half an hour in the twenty-four, the patient was freed from all his complaints. He soon after went to the university, where he continued in good health, and could take a walk of several hours without inconvenience, though the deformity of the thorax and spine still continued.

*(To be continued in our next Number.)*

## MEDICAL CORRESPONDENCE.

(Communications for this department will be gratefully received.)

Art. 1. *New Experiments on Respiration and its Use.* By Professor ABILGAARD, of Copenhagen. *With Remarks by* Professor PFAFF.

IN the first number of the Nordische Archiv (a copious review of which will be given in our next) are contained the results of some experiments on the respiration of animals, by Professor ABILGAARD, of Copenhagen, which seem to throw a new light on this interesting subject. He shews, that not more than three cubic inches of atmospheric air is usually inspired at each time of breathing; and, consequently, that the general mass of air in the lungs is but very slowly renewed.

But, we know from experience that the retention of breath causes the same uneasiness and inconveniences after inspiration as after expiration; though, according to theory, it should be easier to retain the breath after inspiration.

The wind-pipe was opened in two dogs, and by a convenient apparatus, azotic gas injected into the lungs of one, and oxygen gas into those of the other; and after the lungs seemed thereby perfectly extended, a ligature was applied to their wind-pipes. Both dogs felt the same painful sensation in the attempt of gasping for breath, and there was no difference perceived except that the latter lived eleven minutes, whereas the former died in five. The movement of the heart still remained for some time visible in both after the breathing had ceased. The question now is, why both animals attempted to breathe with equal sensation of pain and uneasiness, though one had the most salubrious air in the lungs? and why did they die before the movement of the heart, and consequently the circulation, had ceased?

It has been observed by repeated experiments, that animals, being in a state of asphyxia, and restored to life by air being injected

injected into their lungs, did not catch breath before the heart began to beat; if, therefore, the motion of the heart is supposed to cease from want of oxygen, why does it beat in this case before breathing is re-established?

Air drawn from the lungs of a dog killed by a ligature of the wind-pipe, was found to contain a portion of oxygen, and yet the dog died for want of breath, which seems contrary to the common opinion of the use of oxygen, &c.

Professor Pfaff, however, has offered some observations, which shew a degree of inconsistency between the different experiments of Abilgaard; so that the subject needs still further elucidation.

---

Art. 2. *An extraordinary Case of the medicinal Effects of common Sand.* By Dr. GUTHRIE, of St. Petersburgh.

A GERMAN cabinet-maker, (says Dr. Guthrie,) every time he attempted to work at his bench for several months past, has been seized with violent palpitations of the heart, which soon bring on a swelling, or inflation of the stomach and lower belly; attended with sickness at stomach, so as to incapacitate him for following his trade. More especially a swelling of his legs prevented him from going out to receive his customers' orders; whilst he was deprived of rest in a horizontal position, from a sense of suffocation, every time he attempted to lie down in his bed.

For these complaints he consulted several practitioners, and took their prescriptions without success; till at last a neighbour advised him to swallow, every day, a table-spoonful of *common sand;* which, his wife tells me, she washes, dries, and duly administers.

It purges him pretty briskly, and the swelling of his legs is gone, with the inflation of the stomach and abdomen; so that he can now sleep, eat, and walk: which last fact I can bear

bear testimony of, as I found he was waiting in my garden; and, on being called up, confirmed, in his own language, all his wife had more rapidly told me in French.

This medical anecdote I thought worth relating, from its singularity. Not that I suppose you will be driven to the use of silex in the very seat of medicine, (addressing himself to Dr. Duncan of Edinburgh;) but, as your Medical Annals must certainly find their way where much less assistance is at hand, possibly the sand may not be confined to the gizzarded animals, should others, like our German joiner, find a purge and deobstruent on the floors of their humble habitations.

---

Art. 3. *A remarkable Case of Madness.* By Dr. Jordens.

A YOUNG man was suddenly seized with a violent fit of madness, which was not accompanied with fever. No cause of this disease could be discovered. He became, however, more easy after he had taken some vermifuge medicines. His friends were going to put him to bed; but he had scarcely touched the ground with his feet, when his madness returned with additional violence. Whilst he lay on his bed he was perfectly composed, spoke in a very rational manner, and slept a considerable time. But scarcely had he stept out of his bed in the morning, when he was again seized with a terrible fit of madness, which convinced me that his disease arose entirely from his feet coming in contact with the ground. On examining his right foot, I discovered a piece of glass which had penetrated it four years before. His friends informed me, that he had not complained of any pain during that interval; but tight shoes seemed to have changed the situation of that piece of glass, which, irritating the nerves, had produced madness. After the piece of glass was extracted, every symptom of his disease instantly disappeared, and he was astonished to learn in what a dreadful situation he had been.

Art.

Art. 4. *Petechiæ cured by Means of the phosphoric Acid.* By Dr. Herder, of Weimar.

A BOY, eight years of age, who, as he was an only child, had been indulged to a great degree by his parents, being also of a lax and tender organization, and subject to worms, was taken ill with the measles. He had not quite recovered his health, and was yet affected with a cough, and very weak, when he was attacked with the scarlatina. But this disease was also effectually removed, though there remained anasarca; he coughed violently, and was feverish. The physician, who then attended him, entirely removed the tumefaction by means of mercurial embrocations: but his cough baffled all medical efforts: his spirits became extremely low, his childish amusements appeared insipid to him, he became uncommonly patient and obsequious, was constantly occupied with his books, averse from society, ate and drank little, his hands and cheeks grew hot in the afternoon, and he was affected with slight febrile sensations. He had continued in this state about half a year, when he was intrusted to my care. After I had successfully applied some vermifuge medicines, I ordered vesicatories to be laid on both arms, and prescribed for internal use Islandic moss, dulcamara, juniper-wood, and Peruvian bark; advising, at the same time, warm sulphureous baths with unslacked lime, the utility of which I had repeatedly experienced in disorders of the cutaneous functions both topical and universal. But the parents of my little patient, waiting for warmer weather, procrastinated the use of these baths day after day. The other medicines, which had been administered, proved, however, extremely serviceable; the fever abated, the cough became less violent, but did not cease entirely until the vernal warmth of the atmosphere came to the assistance of nature. The patient enjoyed a tolerable state of health the whole summer; but no sooner had the autumnal season set in, than his cough returned again, growing more violent as the air grew colder; he

he felt again febrile affections, and I was sent for by his parents in Nov. 1798. I tried every mode which experience suggested to remove the cause of his disease, but his cough baffled the power of medicine. In December, when the thermometer was 20 degrees below 0, I was unexpectedly sent for one day, to stop a bleeding through the nose, with which he had been seized at two o'clock in the morning: it bled and ceased alternately; but during these short intervals the child perceived a pressure in the forehead and a tickling in the nose, which continued till he began again to bleed. I found him extremely pale and weak, but nevertheless lively. I succeeded, towards evening, in stopping the hæmorrhage. He slept well at night, was cheerful in the morning; but his debility was extreme, and his pulse very irregular. The bleeding returned again with additional violence early on the subsequent morning, and could not be conquered by means of the most powerful styptics before the next morning. The boy was extremely weak, as he had lost several pounds of blood, and could not stand alone, though he did not keep his bed. He had no fever, his eyes were sparkling, his pulse low, his respiration intermitted, and was short and quick, and his appetite did not entirely fail him. The bleeding did not return any more; he passed the night tolerably well; but his parents observed, in the morning, little spots in different parts of his body, like the bites of fleas. His stools were, at the same time, mixed with some blood.

I perceived in the first instant that these spots were petechial. They gradually spread over the whole body, grew larger every day; some were even as large as a lentil, whilst in many places they turned black. His pulse was low and irregular, but became stronger in the afternoon, when he began to be feverish. His breath now grew shorter, his cough more violent, and his stools were always mixed with blood. I exerted myself to the utmost of my abilities to counteract the total debility of his frame, and the dissolution of the blood, which was rapidly gaining ground; but all my exertions proved fruitless: the petechiæ

increased

increased in number; those that had been standing some time assumed a deeper colour, and those that were black grew visibly larger. The white of the eyes, his mouth, gums, and lips, were covered with petechiæ. Blood issued incessantly from the veins and lips; his tears had a bloody appearance, his sweat was red, and blood was discharged by the nose, urine, and stool. The child seemed to be past all hope of recovery; his whole body was tinged with blood, his limbs were cold, and his nose was pinched; he was scarcely able to articulate incoherent sounds, when suddenly it occurred to me that phosphoric acid perhaps might prove the means of saving his life. Elated with hope, I administered it at four o'clock in the afternoon in the following form: ℞ Acid. phosphor. pur. ʒj, Aquæ menth. piper. ʒv, Syrup. pæon. ʒij. M. D. He took in the beginning from ten to fifteen drops every half hour, and afterwards twenty drops every hour, all other medicines being discontinued.

Scarcely had a few hours elapsed, when the child began to revive; new life and warmth were diffused through his emaciated frame; he enjoyed a sound and invigorating sleep, and was able to quit his bed the next morning.

The continuation of the same medicine soon removed every dangerous symptom; the bloody excretions ceased suddenly; his strength increased hourly; the larger petechiæ lost their dark colour, whilst the smaller ones disappeared entirely; even his cough became less violent; and the febrile affections, which returned in the afternoon, as usual, were very slight. A short time enabled him to quit his apartment; and the daily use of a mixture of Peruvian bark, Islandic moss, and phosphoric acid, restored him in a few weeks to the complete enjoyment of his health. The congenial breezes of the vernal air delivered him entirely from his cough, and he is at present as lively and healthy as his parents can wish.

During the same severe winter, when asthenical bloody fluxes occurred more frequently than ever, I also cured a lady

above 60 years old, of a most violent bleeding of the nose, as well as of its consequences, by means of the phosphoric acid in the above-mentioned form.

---

Art. 5. *On the medicinal Powers of the vitriolic Acid in nervous Diseases.* By Dr. HILDEBRANDT.

A WOMAN, 30 years of age, and of a tender constitution, being suspected of having murdered her infant, was confined in a dungeon, when sudden terrors threw her into the most violent convulsions, which frequently returned, especially at the time of her monthly evacuations, and often lasted several days. Her menses were, at the same time, so copious, and lasted so long, that her frame became totally emaciated. In that state she was conveyed to the hospital, aud received into the Clinical Institution. Proper diet and the tincture of cinnamon soon reduced her menses to a natural state; but the convulsive fits continued to return eight or ten times at every menstruation, though with less violence than before. Assa-fœtida had been administered to her a considerable time without producing any alteration.

Whilst my patient was in this state, an epileptic young woman, who had contracted her disease by abandoning herself in a violent degree to her passions, and was subject to frequent fits, was laid in the same room. From the moment in which this young woman was seized the first time with epileptic fits in the hospital, the state of my patient grew visibly worse; so that she now was subject every day to three or four epileptic paroxysms of the most violent nature. The two women always corresponded in their fits, the one being instantly seized with a paroxysm when she looked at the other, which rendered a separation absolutely necessary.

The fits of my patient became now less frequent, though they returned at least twice every day with unabated violence.

Valerian,

Valerian, with flores zinci, and an infusion of bitter orange-peel, were administered a long while to no purpose. The patient happening, however, to be seized several times with her fits whilst I was present, I observed, that the froth of her mouth was bloody, and more copious than it is commonly seen in diseases of this nature. On examining her, I found that she had not injured her tongue during the fits, as I imagined; and observed, during several subsequent paroxysms, that a bloody froth was forced up into the mouth, and on account of the trismus could penetrate the interstices of the teeth only in the form of a froth, but was spit out by her as soon as the fit was over. As part of the medicine which she had taken a short time before she was seized with a fit, was brought up with this froth, and the blood which came up had a blackish appearance, it was evident that it must have come from the stomach. I had also reason to conclude that the suppression of her menses had no small share in the vomition. This determined me to administer to her vitriolic acid diluted in barley water, in order to contract the bleeding vessels of the stomach; whilst I ordered her pudenda to be fomented. By these means I succeeded in gradually reducing the bloody vomiting, without promoting the menses, and at the same time had the satisfaction to perceive that her epileptic fits decreased both in frequency and violence. The patient recovered so much in four weeks after she had taken this medicine, that she could now quit the hospital, and to my knowledge has not had another fit since.

As the patient, besides the vitriolic acid, had continued to take other medicines, I could not be positive in ascribing her cure exclusively to the effects of this remedy, which determined me to make another trial with the epileptic young woman who had been received into the hospital soon after her admission, and experienced no relief from the use of valerian, opium, and flores zinci. In order to ascertain my supposition, I gave her no other medicine than diluted vitriolic acid, at first two

drachms a-day, and afterwards four. I was astonished at the rapidity with which her amendment advanced, and after the lapse of three weeks had the pleasure of seeing her perfectly recovered from her disease. She continues to be totally free from epileptic convulsions to the present hour.

A boy who was subject to dreadful epileptic fits, the probable consequences of onanism, was likewise perfectly cured by means of the same remedy. I should, however, render myself ridiculous in the extreme, were I to pretend to have cured, by means of the vitriolic acid, all kinds of ner vou diseases without discrimination. Where local or organic causes exist, this remedy cannot be expected to afford any relief; but where the disease lies in the whole system, if I may use this expression, I flatter myself that I shall be able to make many more successful trials with the vitriolic acid.

---

Art. 6. *A remarkable Phenomenon relative to the Sweating of the Feet.* By Dr. Dürr, of Pegau.

I HAVE in two different cases (says the author,) had an opportunity of observing that the menses were very irregular, and flowed, with long intervals, in two females, who, after their monthly evacuations, were affected with a sweating of the feet; which, notwithstanding every care that was taken to keep them clean, smelled uncommonly strong. But as soon as the menses began to flow the sweating ceased imperceptibly, and was succeeded by an acrimony in the stomach, which was extremely troublesome, and obstinately resisted every medicine; but it was not felt any longer than until the menses ceased to flow. In order to throw additional light upon the metastases of this secretion in the feet, I beg leave to extract from the papers of my late father the subsequent account of his own case relative to this subject:

"The sweat of the feet, as Lentin has repeatedly observed, is very apt to rise into the head, the nose, the ears, the gums, and the breast, and, in case of excessive debility, or irritation, into the stomach. The teeth and the gums, in particular, are exposed to this disease. When a lad, I was so imprudent as to jump into a river whilst my feet, as usual, were copiously sweating, without having previously cooled them; the consequence of which was a total insensibility, with which I was instantly seized. Speedy assistance, however, restored me again to life. My feet entirely ceased to sweat from that time; but I soon after lost my four hindmost teeth without feeling much pain, and the gums of that part were affected with an ulcerous secretion, which continued uninterruptedly the rest of my life, without, however, being attended with any fetid smell."

---

Art. 7. *Remarks on the medicinal Use of Phosphorus.* By Drs. Handel and Hufeland.

I. *The Efficacy of Phosphorus in Epilepsy.* By Dr. Handel, of Mayence.

Accident, to which we owe the principal share in many important discoveries, (the author says,) made me acquainted with the efficacy of phosphorus in epilepsy.

A young lady, sixteen years old, of an irritable temper, had weakened her constitution so much, that her monthly evacuations became at first extremely irregular; and afterwards, the least disagreeable occurrence occasioned to her the most dreadful spasms in the stomach and the intestines, which commonly terminated with a swooning, and when this did not take place, were followed by the most violent epileptic fits. The unfortunate woman, though allied with two physicians, vainly struggled two years against her disease. Being, at length, driven to despair by repeated disappointments of the most

most painful nature, she applied to me for assistance. I complied most readily with her request; but should not have been able to ward off her impending destruction, had not accident pointed out to me the means of saving her life.

A small vial, containing about two drachms of phosphorus in water, had been left in her bed-room by her brother, who had procured it for the purpose of making some physical experiments. One day repeated yawning, dryness of the mouth, and a sensation like an electrical stroke, originating in the feet and following the course of the nerves up to the brain, (the common precursors of her fits,) urged her to have recourse to a vial containing peppermint water, which had repeatedly served her as a good palliative. The agony in which she was, preventing her, however, from finding the vial she was in search of, she felt herself instinctively impelled, as it were, to take up that in which the phosphorus was; and having thrown away the inflammable substance, drank the water it had been kept in, whereby the paroxysm was entirely prevented. Encouraged by this accident, I resolved to apply phosphorus itself, especially as Leroi had already observed its beneficial effects in malignant fevers. The following is the form in which I prescribed it:

℞ Phosphor. gr ij. Solve in Ol. hyosciam. (e fol. huj. plant. cum ol. oliv. infus. parat.) ℥ß. Admisce. Extract. chamom. e tot. plant. Aq. menth. piperit. āā ℥ß. I ordered my patient to take a table-spoonful of this medicine every two hours, and after two months had the pleasure of seeing her totally freed from a state of torture, which had rendered life an almost intolerable burden to her.

The result of my subsequent repeated experiments with the same remedy in epilepsy, shews:

1. That it reduces the violence of epilepsy, whether inherited or originating from organic disorders; but by no means subdues this disease entirely. 2. That it put a stop to the epilepsy in three persons, of whom one was subject to it from a disease

a disease in the abdomen, the other from a repelled eruption of the skin, and the third from too much delicacy and weakness of the whole system; 3. and cured it in four patients in whom it originated from a too quick circulation of the blood, and a determination of it to the head; whilst it proved evidently hurtful to another person whose disease was produced by a considerable concussion of the cranium.

II. *Emulsio Phosphorata.* By Dr. HUFELAND, of Jena.

IT is known that phosphorus is a very active medicine, exciting the vital powers and promoting secretion; whence it may be applied with great benefit, the author says, in extreme relaxation of the nerves, in atonic rheumatism, palsy, impotentia virilis, &c. &c. I have successfully applied it in two cases of an inveterate *arthritis nodosa*, when it operated as a most powerful sudorific and diuretic medicine. It may also be recommended against chronic diseases caused by the poisonous effects of lead and arsenic. I have likewise been credibly informed, that a person who, in Italy, was poisoned by means of *aqua toffana*, and who was at the brink of the grave, (his whole body being already parched, and his hair and nails falling off,) was saved by the application of phosphorus, after a great variety of medicines had been tried in vain. I must, however, observe, (which repeated experience has taught me,) that it is an extremely dangerous remedy, and should be applied with the greatest caution, as it is very liable to cause inflammation in the stomach and the intestines, and to produce callosities in these parts. If it produce inflammation, acute and burning pains are felt in the region of the stomach. I have witnessed several instances of this effect which generally proves mortal. If callosities be the consequence, it causes chronical cramps of the stomach, difficulty of digestion, obstinate vomiting, costiveness, and finally, hectic fever and death. Indurations in the stomach seem to be an effect peculiar to phosphorus.

The

The inflammations and indurations so frequently occasioned by phosphorus, appear to me to arise chiefly from too large doses, or from its being administered in substance; in which case a small particle may easily fix in some part of the stomach, where its concentrated topical effect (perhaps a slight combustion) causes an inflammation or a callosity. If, therefore, this medicine is to be employed with safety, every thing depends upon its being administered in a proper dose and form.

With regard to the dose, I have observed, that no more than two grains can be safely taken within twenty-four hours, as a larger quantity is invariably succeeded by burning pains. One grain, taken in twenty-four hours, is, however, sufficient to produce the desired effect. The form in which this medicine is administered, is likewise of the greatest importance. It is highly necessary that the phosphorus should not only be completely dissolved, but also involved in a proper vehicle, capable of defending the stomach against the immediate effects of its too irritating power.

The forms hitherto commonly used were either the admixture of a conserve, (the most improper of all,) or a solution in oil, (highly proper, but extremely nauseous,) or a solution in naphtha, which, indeed, completely dissolves it, but also increases its heating and irritating power. The application of phosphorus in this form is, however, of eminent service in all cases where an high degree of weakness or insensibility predominates.

The form, in which I prefer to prescribe phosphorus, is the following:

℞ Phosph. urin. gr. ij, Subig. exact. longa trituratione c. Mucilag. gummi Arab. q. s. ut f. c. Aq. fontan. ℥vj. Emulsio. —Adde Syrup. emuls. ℥j. Liquor. anod. Hofm. gtt xxx. M. D. S. A table-spoonful, or more, to be taken, if necessary, every two hours.

Art.

Art. 8. *Of the Cynips Rosarum; a new Remedy against the Toothach.* By Mr. Hirsch, Dentist to the Elector of Hanover.

It is now two years (the author says,) since I first recommended the bruised chrysomela septem punctata rubbed on the gums, as a remedy against toothach*. The efficacy of this remedy has been since confirmed by numerous experiments. I must observe on this occasion, that it does not always give relief when the patient is afflicted with caries of the teeth, or ulcers of the gums; and in inflammations it increases the pain. But when the inflammation has abated and the pain continues, it will remove them to a certainty. It affords me great pleasure to be able to recommend another remedy which gives relief in many cases where the other does not succeed, and can be procured in winter when the chrysomela is difficult to be preserved: this is the cynips rosarum, which may be obtained from the excrescences growing on rose-trees. It is sometimes found on wild rose trees in excrescences which frequently are as big as a golden-pippin, hairy on the outside, and of a brownish colour. This excrescence was formerly sold in the apothecaries shops under the names of spongia cynobastos and fungus bedeguar rosarum. It is occasioned by the sting of a little winged insect, *Cynips rosæ*. As this insect introduces an egg into the aperture, either the eggs or larvæ are found in it. One of the white maggots which come out of these eggs is bruised betwixt the fingers, and immediately rubbed on the affected tooth, as well as upon the gums. If one affords no relief, an additional application in most instances will remove the pain. The insect has a taste perfectly sweet, and does not produce the pungent irritation which generally is occasioned by the chrysomela; it may therefore

* For an account of Mr. Hirsch's experiments with this insect, see our Second Number, vol. i. p. 163.

be safely applied even in inflammations. It has failed only twice in sixteen cases where I applied it, and I shall be happy to find my experience of its efficacy confirmed by others.

---

## Art. 9. Professor OSIANDER's *Case of swelled Testicle.*

(Concluded from page 306.)

### *Appearances on Dissection.*

THE skin of the whole body was of a livid yellow colour, and emphysematous from head to foot.

The mouth was covered with a very thick froth, and a bloody ichor flowed from the eyes and nose.

The whole scrotum was black and emphysematous. On enlarging the wound, an intolerable fetor issued from it; and when an incision was made into the emphysematous tunic of the testicle, which was swelled to the bulk of a goose's egg, a black pappy matter flowed from it, of a still more offensive smell. From its appearance I could not have supposed this substance to have been the testicle; it looked more like a sack of the peritonæum filled with putrid blood: but upon washing this sack with water, the dissolved seminal vessels were distinctly observable, attached to its internal surface.

From this destroyed testicle the spermatic cord was visible, passing through the relaxed abdominal ring, over the psoas muscle, to the right kidney, which was dislodged from its natural situation and seated higher up under the liver and near to the spine. The vaginal coat of the spermatic cord was distended throughout with blood, and half way up towards the kidney; it contained also pus. *(See the Engraving in our last Number.)* Near to the kidney, on the left side, was another large sack filled with fetid black blood and ichor.

The whole intestinal canal on the right side of the abdomen adhered together, and to the peritonæum, by preternatural membranes.

The

The pancreas was seated lower than natural, near to the sack filled with blood at the right kidney, and indurated. The indurated parts contained a yellow sebaceous substance.

The liver was very large and hard, and the gall-bladder distended with bile.

The omentum was in its natural state, and expanded over the intestines.

Behind the abdominal ring, on the left side, a sound testicle was found, of the size of a pigeon's egg.

The kidney and spleen on the same side were of the natural size, but, like the right kidney, of a very soft and friable consistence.

The musculi cavi abdominis, such as the psoas, were dissolved on both sides into a very soft jelly.

The large vessels at the spine were void of blood, but the lungs were filled with it.

The heart and head were not dissected.

The intestinal canal was in its natural state, and no worms were discovered in it.

Professor Osiander accounts for the symptoms of this case in the following manner:

The swelling, which appeared under the short ribs immediately after the fall of the patient, was probably occasioned by a rupture of some vessel in the cavity of the abdomen; the extravasated blood forming the sack at the kidney, which at first was more full of blood than in the progress of the disease. This sack, formed by an appendage of the peritonæum, drew the kidney towards it, out of its natural situation. By degrees, the blood contained in it made its way downwards through the interstices of the peritonæum, till it arrived at the abdominal ring; where it opened itself a passage, and, together with it, the testicle gradually passed through.

The spermatic cord being squeezed together in the abdominal ring, and at the same time pressed upon by the blood collected behind it, the testicle became tumefied and gradually

died away; its dissolution was accelerated by the warm poultices applied to it by the surgeon. The testicle being entirely dissolved, its power of sensation was of course destroyed, and consequently the swelling could bear strong pressure without occasioning any pain. The abdominal ring and spermatic cord, however, still possessed both life and sensation.

The extravasated blood contained in the tunica dartos, in the testicle, in the vaginal coat of the spermatic cord, and in the sack at the kidney, did not go into putrefaction before the operation; not being yet in contact with the air of the atmosphere, the principal agent in the putrefactive process. By the incision of the dartos, however, the air was admitted, and hence all the general and topic symptoms of putrefaction before death, and the emphysema after. To this general putrefaction, the rapid progress of the disease towards its fatal termination is to be ascribed.

---

Art. 10. *Opening of the medical Lectures, &c. in Edinburgh.*

WE are informed that the different classes of medicine, &c. in the university of Edinburgh were opened on Wednesday the 29th of this month, at the following hours:

1. Anatomy and surgery—Drs. MONRO—one o'clock, P.M.

2. Chemistry and chemical pharmacy—Dr. HOPE—ten o'clock, A.M.

3. Dietetics, materia medica, and pharmacy—Dr. JAMES HOME—eight o'clock, A.M.

4. Theory of physic—Dr. DUNCAN—eleven o'clock, A.M.

5. Practice of physic—Dr. GREGORY—nine o'clock, A.M.

6. Theory and practice of midwifery—Dr. HAMILTON—(the hour not specified.)

7. Clinical lectures on the cases of the patients in the Royal Infirmary commence on Tuesday, 11th November.—Tuesdays and Thursdays.

8. A course of botany will be delivered in the summer by Dr. RUTHERFORD.

9. The Royal Medical Society opened on Friday the 25th of October.

---

Art. 11. *Monthly Catalogue of new and intended Publications.*

[Our list of new and intended *British* publications, for the present month, has been transferred to the next Number (being the Twenty-first) with which our FIFTH VOLUME commences,—as these two Numbers will be published together, on the first day of November.]

NEW FOREIGN PUBLICATIONS.

1. PHILOSOPHIE entomologique. Par F. SAINT-AMANS. Octavo. Paris, Villier.

2. Premier Cahier des Elémens de Minéralogie, selon la Méthode de Daubenton. Par A. TRAVERSEY. Octavo. 116 pages. Paris, Croullebois.

3. Bulletin des Sciences, par la Société Philomatique de Paris. Quatrieme Année. Quarto. Fuchs.

4. Journal de Physique, de Chymie, et d'Histoire Naturelle. Quarto. Tome L. Paris. An VIII. Imported by De Boffe.

5. Dix-sept Articles relatifs aux Maladies des Dents, ou l'on démontre que les Signes de beaucoup de Maladies fréquentes sont placés à la Bouche, que l'Inspection de la Bouche fait connoître la Constitution individuelle et la Source des Maladies; Théorie mise en pratique pour le Traitement des Dents, et Designation des Maladies auxquelles elle est applicable. Par LOUIS LAFORGUE, expert Dentiste, reçu au Collège de Paris. Octavo. 204 pages. An VIII.

6. Fleurs dessinées d'après Nature. Par G. VAN SPAENDONCK, de l'Institut National, Professeur-Administrateur du Muséum d'Histoire Naturelle. Gravées par G. F. LEGRAND. Il en parôitra un Cahier tous les trois Mois. Paris. 1800.

7. Cours d'Instruction d'un Sourd-muet de Naissance, pour servir à l'Education des Sourd-muets, et qui peut-être utile à celle des Enfans qui attendent et qui parlent. Avec Fig. et Tableaux. Par ROCH AMBROISE SICARD. Paris. 1800.

8. Instruction sommaire sur l'Art des Pansemens à l'Usage des Etudians en Chirurgie. Par LOMBARD. Octavo. Strasbourg.

9. Dictionaire Elémentaire de Botanique. Par BULLIARD. Revû, et presque entièrement réfondu par LOUIS RICHARDE, Professeur de Botanique. Paris. 1800.

10. Essai sur les Propriétés médicinales de l'Oxigène, et sur l'Application de ce Principe dans les Maladies vénériennes, psoriques, et dartreuses. Par le Cit. ALYON, Membre de la Société Médicale, &c. 2d edit. Octavo. Paris. An VII.

11. Bibliothèque Germanique medico-chirurgicale. Par les Cit. BREWER et DELAROCHE. Tome IV. Octavo. Paris. 1800. Imported by De Boffe.

12. Le vrai Trésor de l'Homme, ou Moyens assurés de conservir sa Santé. Octavo. Paris, Belin.

13. Apperçu général suivi de quelques Faits sur l'Origine et le Sujet de la Médecine légale. Par P. SUE. Duodecimo. Paris. An VIII.

14. Recueil périodique de la Société de Médecine de Paris. Rédigé par le Cit. SEDILLOT, jeune. No. 44. Floreal, An VIII. Octavo. Croullebois.

15. Annales de Chymie. Par les Citoyens GUYTON, MONGE, BERTHOLLET, FOURCROY, &c. Octavo. Paris, Fuchs. An VIII. Imported by De Boffe.

16. Tableaux synoptiques de Chymie. Par FOURCROY. Pour servir de résumé aux Leçons de l'Ecole de Médecine de Paris. Quarto. 12 Tab. Paris, Baudouin.

17. Elemens ou Principes physico-chymiques, destinés à servir de suite aux Principes de Physique, à l'Usage des Ecoles centrales. Par M. J. BRISSON. Octavo. 428 pages, avec Figures. Paris, Bossange.

18. Recherches sur l'Influence de l'Air dans le Développement, le Caractère, et le Traitement des Maladies. Par A. Bouffey. Octavo. 176 pages. Paris, Didot.

19. Histoire de la Fièvre qui a régné épidémiquement à Grenoble, &c. la presente Année. Par le Cit. Trousset. Octavo. 81 pages. An viii. Grenoble, Giroud.

20. Observations rares de Médecine, d'Anatomie, et de Chirurgie. Traduite du Latin de Van der Wiel, par M. Planque. 2 vols. 12mo. Fig. Paris, Rémont. An viii.

21. Réflexions sur la nouvelle Méthode d'inoculer la petite Vérole avec le Virus des Vaches. Par J. S. Vaume. Duodecimo. Paris, Mequinon, l'aîné. 1800.

22. Abhandlung uber die Hæmorrhoidal Krankheit; *i. e.* A Treatise on the Hæmorrhoides. Translated from the Latin of Wenzel Tonka von Kozowitz, with Additions by Gottlieb Knebel. Breslau. 1799. Three vols.

23. Einleitung zur Pflanzenkunde; *i. e.* Introduction to the Knowledge of Botany. By Conrad Moench. Marburg. 1799. Octavo.

24. Beobachtungen und Erfahrungen ueber Melancholie, &c.; *i. e.* Practical Observations and Facts on Melancholy, especially on Melancholy arising from religious Notions. By a Chaplain to a House of Correction. Octavo. Leipzig. 1799.

25. Cur und Erkentniss der Fieber; *i.e.* The Diagnosis and Cure of Fevers. By Reil. Vol. I. and II. New Edition augmented. Halle. 1799.

26. Lehrbuch der Physiologie; *i. e.* Compendium of Physiology. By D. Frederick Hildebrandt. Second Edition, augmented. Erlangen. 1799. 496 pages. Octavo.

27. Medicinisch-Chirurgische Abhandlung über die Krankheiten der Zaehne; *i. e.* A medical and surgical Treatise on the Diseases of the Teeth, the Gums, and on the Difficulty of cutting Teeth in Children. By Christian Frederick Ettmuller. Leipzig. 1799.

28. Die allgemeine Heilkunde; *i. e.* General Therapeutics. By

By Dr. Johann Clemens Tode. Vol. I. 1797. Vol. II. 1799. 230 pages. Leipzig.

29. Umriss des Zustandes der Wundarzneykunst bey den alten Roemern vorzuglich zu den Zeiten des Celsus durch erlaeuternde Anmerkungen mit der heutigen Wundarzeneykunst verglichen und anwendbar gemacht; *i. e.* An historical Sketch of the Science of Surgery among the ancient Romans, particularly during the Time of Celsus, compared with the modern Practice of Surgery, and rendered applicable by explanatory Notes. By Johann Christ. Jaeger. With a Preface by Dr. Gruner. Second improved Edition. 1799. Franckfurt, Jager.

30. Neue Theorie der Absonderung durch unorganische Poren; *i. e.* A new Theory of the absorbing Process by Means of unorganic Pores; together with a Description of the lymphatic Vessels. By Paul Mascagni, Professor of Anatomy at Siena. Translated into German by Peter Lupi, with Annotations. Two Volumes. Leipzig, Weidmann.

31. Medicinische Schriften, &c.; Metzger's medical Works. Vol. I. Octavo. 1800. Koenigsberg, Gobbels and Unzer.

32. Journal der Practischen Heilkunde, &c.; *i. e.* Hufeland's Journal of the Practice of Medicine. Vol. VIII. and IX. This work was also published under the title of New Medical Journal, Vol. I. Part I. II. and III.

33. Die medicinische Aufklaerung; *i. e.* Medical Illumination. By J. K. Osterhausen. First Vol. 366 pages.

---

Art. 12. *Answers to Readers and Correspondents.*

THE communications we have received from Sir *Christopher Pegge*, Mr. *Harrup*, Dr. *Nisbet*, Mr. *Oliphant*, Mr. *Blair*, Mr. *Savigny*, &c. with our answers to several queries of *Medicus*, are inserted in the Twenty-first Number of our Review, to be published on the 1st of November.

# INDEX

## TO THE

# FOURTH VOLUME.


A

ABILGAARD, Professor, his experiments on respiration, 404
Alibert, Dr. Dissertations sur les Fièvres pernicieuses, 382
Amaurosis cured by rhus-radicans, 37
American plague, the yellow fever so denominated, 8
———— Indians, their manners, 276
Amputation of a wounded limb should not be hastily performed, 349
Anatomy, a new method of studying, recommended, 55
Animals, the laws of nutrition of, elucidated, 53. Slow-moving, a peculiarity in their arteries, 330
Answers to readers and correspondents, 111, 224, 328, 424
Antimony, muriate of, applied in cases of the bite of a mad dog, 157
Apprentices to surgeon-apothecaries, regulations for their conduct, 269
Arteries, peculiarity of, in slow-moving animals, 330
Arts, project for the improvement of, in France, 117
Ascarides, success of sulphur in cases of, 191
Atrophy, ferrum muriatum a powerful remedy in, 191

B

Baeta, Dr. Dissertatio de Febribus intermittentibus, 289
Baillie, Dr. his Engravings of morbid Anatomy, Fasc. IV. 188
Bark successfully exhibited in jaundice, 181
Bath, account of that city and its thermal springs, 296. Composition of the water, 299. Its sensible and medicinal effects, 350. Diseases in which it is useful, 354. The doses of water and the times of bathing particularized, 357
Bathing, rules for, 286. Remarks on the glow which succeeds immersion in cold water, 364. Beneficial effects, in a variety of diseases, of the warm and tepid bath, 365
Bell, Mr. J. his Memorial on the State of military and naval Surgery, 160
——, Mr. C. Appendix to his System of Dissections, Part I. 397
Berlin, Medical Journal of, 393
——, population of that city, 394
Beyträge zur pratischen und gerichtlichen Heilkunde, 180
Bibliothéque Germanique, 300
Biliary diseases relieved by Bath water, 354
Bilious plague, the yellow fever so denominated, 8
Birds, structure of the membrana tympani in, 228
Bistory, concealed, remarks on its use in lithotomy, 158
Blair, Mr. his reflections on caustic and metallic bougies, 209, 321. His observations on trepanning the sternum, 319
Bleeding at the nose cured by phosphoric acid, 409
Blindness, epidemical, 192
Bones, case of extraordinary enlargement of, 153
Books, catalogue of new and intended, 106, 219, 421
Botanical Catalogue, 329
Bougies, the most useful sort of, pointed out, 322. The merits of Mr. Smyth's appreciated, 323. *See* Caustic
Bouttatz, Dr. Ueber den Phosphor als Arzneymittel, 1
Bouvier-Desmortiers sur les Sourds-muets de Naissance, 370
Bradypus tridactylus, peculiarity in the distribution of its arteries, 331
Brewer and Delaroche, Messrs. their Bibliothéque Germanique, 300
Brown, Mr. his translation of Burserius's Institutions, 168
Buchan, Dr. A. P. his case of obstruction in the œsophagus, 77
Burserius's Institutions translated, 168

C

Cæsarean operation, reflections on, 31, 141. Explanation of some circumstances relative to it as performed at Manchester, 98. Remarks as to the most proper time and best mode of performing it, 146

Calculi, powerful effect of the infusion of peach-leaves in removing, 81. Comparative number of males and females affected by, at Lunéville, 151

Calomel successfully exhibited in jaundice, 85, 204

Camphor, anodyne effects of, 201

Cancer, its progress and treatment described, 262. Account of a cure of, 315. Investigation of its nature, 377. A successful plan for the treatment of, announced, 380

Cancerous ulcer, indications and treatment of, 261

Cappel, Dr. de Pneumonia Typhode, 43

Cavanilles, Icones et Descriptiones Plantarum, &c. 136

Caustic, the application of, in strictures of the urethra, disapproved, 21. The practice defended, 210, 322. Mode of preparing the caustic bougie, 211

Chaptal, M. his experiments on verdigris, 49; and on the juice of euphorbium, &c. 52. His Essai sur le Perfectionnement des Arts chimiques, 116

Chemische Annalen, 38

Chemistry, modern, the Principles of, 399

Children, reflections on the errors in the management of, 274, 278. Acute fever in, greatly relieved by warm bathing, 366

Chin-cough, good effects of the meadow-narcissus in, 36

Chlorosis relieved by Bath water, 354. Cold bathing detrimental in, 365

Chrysomela, its efficacy in toothach appreciated, 417

Cinchona, its power in the cure of intermittents, 383. Mode of administering it, 388

Climbing, advantages of that exercise, 284

Clinical Guide, Part III. 23

Coccus ilicis, its classification and uses, 167

Colic cured by the external application of laudanum, 191

Colica pictonum, utility of Bath water in, 356

Combustion, human, explanation of the phenomenon of, 113

Comets, their powerful influence on the physical state of the globe, 12, 118

Cooper, Mr. on the effects from the destruction of the membrana tympani, 332

Corn laws, an alteration in, suggested, 115

Correspondents and readers, answers to, 111, 224, 328, 424

Cow-pox, its extreme mildness, 56, 60. Cannot be communicated by contagion, 56. Cautions to be observed in the inoculation for it, 57, 58. Stated to be a security against the small-pox, 57, 61, 63, 64, 72, 208. This position controverted, 65, 94, 105, 208. The genuine and spurious species must be carefully distinguished, 58, 62. The variolous infection asserted to be a preventive of it, 59. A different opinion admitted, 63. Peculiarities between it and the small-pox, *ib.* Objections to it answered, 60. The question of the appearance of pustules examined, 60, 67, 70, 91, 200. Removes scrofulous affections, 65. Dispute concerning the purity of the matter obtained from the Small-pox Hospital, 70, 92, 307. Testimonial in favour of it, 90. An institution at Paris for promoting the inoculation of it, *ib.* It is successfully introduced in that city, 206. Remarks on its origin, 95. It will mitigate, if not supersede the small-pox, 309

Cranium, human, its weight at different periods, 52

Crell, Dr. his Chemische Annalen, 38

Cretinism, the term defined, 265. Remarks on that malady, 266

Crotchet, observations on the proposals for abolishing its use in deliveries, 28

Cuprum ammoniacale recommended in epilepsy, 191

Cynanche maligna, classification, history, description, and treatment of, 241

——— trachealis, case of, 312

Cynips rosarum, a good remedy in toothach, 418

D

Danzmann, Dr. his extirpation of a scirrhous tumour of the tongue, 400

Deaf and dumb persons, on the means of curing, 370

Desessarts, M. memoirs by, 52, 54, 156

Digestion, the process of, 359

Digitalis recommended in dropsy, 191

Dissertatio de Febribus intermittentibus, 289

Dissertations sur les Fièvres pernicieuses, 382

Dropsy, digitalis recommended in, 191

Dufresnoy, M. sur l'Usage de Rhus-radicans, &c. 33

Dunning, Mr. his Observations on Vaccination, 64

Dürr,

Dürr, Dr. his account of a remarkable phenomenon relative to the sweating of the feet, 412
Dynamic system, principles of, 390

E

Ear, the structure and uses of the membrana tympani of, elucidated, 225, 338. Uses of the more internal parts of, 234
Earthquake, account of a dreadful one, 139
Eating, temperance in, recommended, 41
Edinburgh Practice of Physic and Surgery, 239
————, opening of lectures and of the Royal Medical Society at, 420
Education, faults in, pointed out, 275
Egypt originates the plague, 10. *See* Plague
Elastic gum, method of dissolving, 49
Electric fluid, advantages of employing it as a decomponent, 339
Electricity successfully applied in deafness, 370
Elephant, the membrana tympani of, described, 226. His peculiar quickness of hearing, 237
Emaciation, singular case of, 54
Emulsio phosphorata, form of, 416
Epidemic and pestilential Diseases, History of, 5, 117
Epidemy, variolous, account of, 180
Epilepsy cured by meadow-narcissus, 36. Cuprum ammoniacale recommended in, 191. Vitriolic acid admininistered with success in, 410. Removed by phosphorus, 413
Erysipelas may be communicated by contagion, 96
Esquisse d'un Cours d'Hygiène, 272
Eudiometry, imperfection of that branch of philosophy, 387
Euphorbium, experiments on the juice of, 52
Excitability, illustration of the doctrine of, 39
Exercise indispensable to the preservation of health, 42
Exercises, juvenile, different kinds of, described, 281

F

Fahner, Dr. his Beyträge zur pratischen und geritchtlichen Heilkunde, 180
Farriery, reflections on, 288
Feet, sweating of, a remarkable phenomenon attending, 412
Fermor, Mr. his Reflections on the Cow-pox, 56
Ferrum muriatum a powerful remedy in rachitis and atrophy, 191
Fever, account of a fatal one in La Vendée, 155. Nature and definition of, 172. Remedies and management recommended in intermittents, 177, 290. Treatment of the slow nervous, 179. Case of intermitting, with remarkable symptoms, 182. Treatment of those of the West Indies, 345. Certainty of the mode of cure now adopted in malignant intermittents, 383. The species of these enumerated, 384. Their exciting causes, 386
Fluids, experiments to ascertain their effect on the aliment, 361
Fluoric acid, unsuccessful attempts at its analysis, 342
Foderé, Dr. his Traité du Goître et du Crétinisme, 265
Foot, a wound of the, causes madness, 406
Formey, Dr. his Medicinische Ephemerides von Berlin, 393
Fowle, Dr. his Treatise on the Fevers of the West Indies, 343
France, miserable state of society and literature in, 34
Fritze, Professor, his cases of successful extraction of polypi nasi, 401

G

Gall-bladder, remarks on its deficiency in the human body, 102
Garnett, Professor, his Lecture on the Preservation of Health, 39
Gaseous fluids, description of an instrument for dislodging them from the body, 74
Germans, ancient, their manners, 276
Germany, Medical National Gazette for, 190
Goître, causes of that disease, 265
Gonorrhœa not always a syphilitic affection, 20
Gout, benefit of Bath water in, 355
Gregory, Dr. his Memorial to the Managers of the Royal Infirmary, 184
Gren, Dr. translation of his Principles of modern Chemistry, 390
Gun-shot wounds, treatment of, 348
Guthrie, Dr. his account of the medicinal effects of common sand, 405
Gymnastics for Youth, 274

H

Hæmorrhage, uterine, case of, 83
Halle, Mr. his case of emaciation, 54
Handel, Dr. his account of the efficacy of phosphorus in epilepsy, 413

Harrup, Mr. on the anodyne effects of camphor, and on calomel in jaundice, 200
Hauy, M. on zeolites, 48
Head, shaving of the, fatal effects from, 192
Health, a Lecture on the Preservation of, 39
Hearing, defects in the correctness of, how caused, 232. Organs of, in fish, birds, quadrupeds, and man, 234. The sense of, little affected by the destruction of the membrana tympani, 332
Heart, case of a wound of, 183
Henry, Mr. his experiments on the decomposition of muriatic acid, 339
Herder, Dr. his account of petechiæ cured by phosphoric acid, 407
Herpes cured by rhus-radicans, 34. Good effects of warm bathing in, 365
Hildebrandt, Dr. on the medicinal power of vitriolic acid in nervous diseases, 410
Hirsch, Mr. his account of remedies in toothach, 417
Histoire naturelle des Salamandres de France, 251
Home, Mr. on the structure and uses of the membrana tympani, 225. His remarks on the effects from the destruction of that organ, 338
Horse, structure of the membrana tympani in, 228
Hufeland, Dr. on the medicinal effects of phosphorus, 415
Hull, Dr. his Observations on Mr. Simmons's Detection, &c. 141
Humboldt, Mr. about to visit a part of South America lately desolated by a tremendous earthquake, 141
Hydrogen asserted to be the basis of muriatic acid, 48
Hygro-eudiometer, a new one described, 387
Hysterotomy, causes which require its performance, 143

## I, J

Jaundice cured by mercury, 85, 204. Bark employed with success in, 181. Removed by Bath water, 354
Idiot, dissection of one who died suddenly, 183
Jenner, Mr. his Address on the Advantages of vaccine Inoculation, 59
Jews, unsuccessful attempt to abolish their custom of early burial, 395
Iliac passion cured by tobacco clysters, 191
Inflammation, the phenomenon of, explained, 169
Intermittent fevers. *See* Fevers.
Introduction à l'Etude de la Botanique, 238
Jordens, Dr. his relation of a remarkable case of madness, 406
Journal für die Chirurgie, &c. 397

## K

Kerrison, Mr. his case of jaundice cured by mercury, 85

## L

Labours, natural, observations on the mode of conducting them, 26. Protracted, directions for the management of, 27. Premature delivery, objections against, 29. A case where it was unsuccessfully attempted, 100. A mode of inducing it suggested, 101. Remarks on this method, 192. Cases of difficult labour from enlarged ovaries, 144. Circumstances under which the exciting of premature labour may be recommended, 196. Cases where it is unjustifiable, 197. *See* Cæsarean Operation, Crotchet, Parturition
Lair, M. Essai sur les Combustions humaines, 113
Lane, Mr. his Principles of English Farriery vindicated, 288
Lassus, P. on prolapsus linguæ, 45. His case of the fatal effects of taking an excessive quantity of opium, 150
Latreille, M. his Histoire naturelle des Salamandres de France, 251
Laudanum, externally applied, useful in colic, 191
Leaping, different kinds of, described, 281
Lectures in autumn 1800, account of, 212, 420
Leeches lose their vigour in the Isle of Man, 313
Leighton, Mr. his observations on Mr. Barlow's mode of exciting premature labour, 100. Mr. Merriman's remarks on Mr. Leighton, 192
Lemur tardigradus, peculiarity in the distribution of its arteries, 330
Lettsom, Dr., presents the Medical Society with a freehold house, 326
Life, explanation of the laws of, 39
Little, Mr. his observations on the cow-pox, 67
Locked jaw, reflections on, 50. Wherein it differs from tetanus, *ib.* Opium the only remedy in, 51
Loder, Professor, his Journal für die Chirurgie, &c. 397
Lourdes, Dr. Notices sur la Vie literaire de Spallanzani, 73
Lucas, Mr. his Inquiry into the Education of a Surgeon-apothecary, 276
Lyceum Medicum Londinense, sketch of its constitution, 327

M

Mad dogs, cases of persons bitten by, 156
Madness occasioned by sudden joy and violent love, 182. By a wound in the foot, 406
Malacosteon, definition and cases of, 143
Malim, Mr. his case of small-pox after the vaccine inoculation, 105, 208. Remarks upon it, 310
Marshy exhalations, their influence in exciting intermitting fevers, 386
Materia Medica, Auct. F. Swediaur, 165
Medical men, eminent, obituary of, 104
——— and chirurgical Pharmacopœia, 311
——— Society of London, plan of, 326
——— Records and Researches, source from which that publication was derived, 328
Medicinische national Zeitung, 190
——— Ephemerides von Berlin, 393
Méhée, Dr. his Traité des Plaies d'Armes à Feu, 347
Membrana tympani, its structure explained, 225. Mistakes concerning its functions pointed out, 229. Remarks on the effects which follow the destruction of it, 332
Memoires de l'Institut National, tom. i. 45, 150
——— sur les Sourds-muets, 370
Memorial to the Managers of the Royal Infirmary, 184
Memorials on the State of military and naval Surgery, 115, 160
Menorrhagia, the cold bath hurtful, but the warm beneficial in, 366
Menses, the flowing of, affected by the sweating of the feet, 412
Mercury successfully exhibited in jaundice, 87, 204. Recommended to be applied in small-pox in France, 155; and in scrofula, 191
Merriman, Mr. his remarks on the mode of exciting premature labour, 192
Military and naval Surgery, Memorials on the State of, 115, 260
——— exercise, its importance pointed out, 285
Mineral Waters, a Treatise on, 291, 350
———, reasoning on the effects of, 367
Morbid Anatomy, Engravings of, 188
Moreau, Dr. his Esquisse d'un Cours d'Hygiène, 272
Muriatic acid, observations on the basis of, 47, 341. Experiments on the decomposition of it, 339
Muscles, their importance not to be estimated by their size, 229
Musical ear, on what it depends, 231. Deterioration of, how caused, 232

N

Narcissus, meadow, recommended in chincough, epilepsy, and tetanus, 36
National Institute of France, Memoirs of, 45, 150. Sketch of its constitution, 45. Prize questions proposed by, 103
Naval and military Service, Memoirs on the medical Department of, 115, 160
Navy surgeons ill requited for their services, 115, 162. Leading points to be observed in their education, 163
Nayler, Mr. his Cursory View of the Treatment of Ulcers, 252
Née, Louis, his extensive botanical researches, 137. His account of a dreadful earthquake in South America, 139
Nervous diseases, medicinal power of vitriolic acid in, 410
Nisbet, Dr. his Clinical Guide, Part III. 23. His account of the cure of a cancer, 315. His Inquiry into the History, &c. of Scrofula, Consumption, and Cancer, 371
Nitre proposed to be applied externally in the plague, 80
Nitric acid, its classification, uses, &c. 167
Nose, cases of the successful extraction of polypi of, 401

O

Oath taken by Prussian physicians, 396
Obituary of eminent medical men, 104
Œsophagus, case of obstruction in, 77
Oils and nitre recommended externally in the plague, 80
Oliphant, Mr. his account of the cure of a cancer, 315
Opium, a fatal case from taking a large quantity of it, 150
Osiander, Professor, his case of a remarkable swelling of the testicle, 301, 418
Ovarium of an old maid, a large excrescence found in, 181
Oxford, account of the pestilential fever at, in 1577, 117
Oxygen, the opinion of its life-sustaining power confuted, 404

P

Paralysis successfully treated with rhus-radicans, 35
Paralytic affections, Bath water sometimes misapplied in, 355. Are greatly relieved by the warm sea bath, 367
Paris, an institution for promoting the vaccine inoculation established there, 90. Successful introduction of the practice, 204

Parturition, symptoms of, 23. Its classification, 24. The several stages of, defined, *ib.* *See* Crotchet, Labours
Peach-leaf tea, its powerful anti-nephritic qualities, 81. Mode of preparing it, *ib.*
Pelletier, M. on elastic gum and strontian earth, 49
Pestilential diseases, opinions on the cause of, 9. Chronological account of several remarkable ones, 13, 117. Means of security against them, 136
Petechiæ cured by the phosphoric acid, 407
Philibert, M. his Introduction à l'Etude de la Botanique, 238
Philosophical Transactions for 1800. Part I. 225, 330
Phosphoric acid successfully exhibited in petechiæ, 407; and in bleeding at the nose, 409
Phosphorus, its medical uses, 1, 415. Recommended chiefly in diseases of debility, 4. Employed in intermittents, 290. Successfully administered in epilepsy, 413. Must be applied with caution, 415
Physical Society at Guy's Hospital, plan of, 327. Their prize questions for 1800, 328
Physicians, College of, their regulations respecting permissi and licentiates, 111. Oaths taken by those in Prussia, 396
Plague, that of the Levant and the yellow fever nearly assimilated, 8. Causes of its dissemination, 13. Observations on the external application of oils and nitre in, 80. Demonstration that the causes of, are not confined to Egypt and the Levant, 119
Pneumatic medicine, its inefficacy in scrofula, 375
Pneumonia, the different species of, and the mode of cure, not accurately defined, 43. The most useful remedies in, enumerated, 44
Polygala seneca, its efficacy in cynanche trachealis, 312
Polypi nasi, cases of the successful extraction of, 401
Portal, M. on the motion of the spinal marrow, 154. His observations on a fatal fever in La Vendée, 155
Principles of English Farriery vindicated, 288
——— of modern Chemistry, 390
Prize questions proposed by the National Institute of France, 103. By the Physical Society at Guy's Hospital, 328
Prolapsus linguæ, symptoms and treatment of, 45
Prussia, late king of, causes which accelerated his death, 394
Publications, new and intended, catalogue of, 106, 219, 421

Q

Quoits, the exercise of, commended, 283

R

Rachitis, ferrum muriatum recommended in, 191
Ranula, a case of, 199
Rectum, observations on a foreign substance in, 397
Reece, Mr. notice respecting his new Pharmacopœia, 311
Renwick, Mr. his Memorials on the medical Department of naval Service, 115
Respiration, experiments on, 404
Rheumatism, the species of, in which Bath water is beneficial, 355
Rhus-radicans, its singular properties, 34. Its utility in herpetic complaints, *ib.*; in paralysis, 35; epilepsy, 36; and amaurosis, 37
Ring, Mr. his observations on varioliform eruptions in cow-pox, 91, 307
Rousseau, his opinions on maternal suckling controverted, 273
Rowlands, Mr. on a dislocation of the thumb, ranula, and the cow-pox, 198
Royal Infirmary, Memorial to the Managers of, 184
Running, the exercise of, observations on, 282
Rush, Dr. his opinion of the origin of the yellow fever, 6

S

Sabatier, M. his reflections on locked jaw, 50. His cases of fractures of the sternum, 154. His observations on the bite of mad dogs, 156. His remarks on the use of the concealed history, 158. His Traité complet d'Anatomie, 188
Salzmann, Mr. his Gymnastics for Youth, 274
Sand, common, its medicinal effects, 405
Saucerotte, M. his account of calculous patients at Lunéville, 151. His case of extraordinary enlargement of the bones, 153
Saunders, Dr. his Treatise on mineral Waters, 291, 350
Sauvages, his classification of diseases commended, 240
Scarpa, Professor, his observations on a foreign substance in the rectum, 397
Scorbutic ulcer, symptoms and management of, 254

Scott, Dr. his case of cynanche trachealis, 312
Scrofula, mercurius dulcis recommended in, 191. Reasoning on, 372. Inefficacy of pneumatic medicine in, 375. A new and successful mode of cure announced, 380
Scrofulous ulcer, marks and treatment of, 257
Simmons, Mr. his inquiry into the infectious nature of erysipelas, 96. His explanation of some circumstances relative to the Cæsarean operation, 98
Sims, Dr. J. his books in the Medical Society, 326
Small-pox, its progress suspended by the miliary eruption, 54. Is a preventive of the cow-pox, 59. Peculiarities between it and the latter disease, *ib.* Erroneously supposed to be communicable only by contagion, 122. Case of, complicated with tetters, 156. *See* Cow-pox
Small-pox Hospital, dispute as to the purity of the vaccine matter obtained there, 70, 92, 307. Is an unfit place for the practice of the new inoculation, 93; or even for that of the small-pox, 307
Smyth, Mr. the merits of his metallic bougies appreciated, 323
Sore throat, malignant ulcerous, classification, history, description, and treatment of, 241
Spain, botany zealously cultivated there, 137
Spallanzani, Notices sur la Vie literaire de, 73
Spinal marrow, memoir on the motion of, 154
Spine, distortions of, a method of curing, 402
Sternum, cases of fracture of, 154. Observations on the trepanning of, 319
Stomach, account of the functions of, 359
Suckling, maternal, Rousseau's positions respecting it controverted, 273
Sulphur useful in cases of ascarides, 191
Surgeon-apothecary, Inquiry into the Education, &c. of, 267
Surgeons, Royal College of, wherein their charter differs from that of the late Corporation, 111. Navy, ill requited for their services, 115. A national school proposed for military and naval, 160. Leading points in their education specified, 163
Swediaur, Dr. Traité des Maladies syphilitiques, 19. His Materia Medica, 165
Swimming, rules for, 286
Symmons, Mr. his account of a peculiarity in the arteries of slow-moving animals, 330
System of Dissections, Part I. Appendix to, 397

T

Tableau de l'Ecole de Botanique, 329
Tapping, the operation of, may be performed during pregnancy, 33
Teeth, cause of the sensation called their being *on edge* explained, 336
Tennant, Mr. his experiments on the decomposition of the muriatic acid, 341
Tenon, M. memoirs by, 51, 52, 55
Testicle, case of a remarkable swelling of, (with an engraving,) 301. The appearances on dissection, 418
Tetanus, wherein it differs from locked jaw, 50
Thilow, Dr. his instrument for dislodging gaseous fluids from the body, 74
Thumb, case of dislocation of, 198
Tobacco clysters cure the iliac passion, 191
Tongue, extirpation of a scirrhous tumour of, 400
Toothach, remedies for, 417
Tow recommended as a proper outer dressing in ulcers, 254
Traité sur les Maladies syphiliques, 19
—— complet d'Anatomie, 188
—— du Goître et du Crétinisme, 295
—— des Plaies d'Armes à Feu, 347

U, V

Vaccination, inoculating with the cow-pox matter so called, 64
Vaccine inoculation, particulars relative to it, 56, 59, 64, 69, 90, 105, 200, 204, 208, 307. *See* Cow-pox.
——— Institution, transmits a packet of matter to Paris, 206. Notice issued by it, 207
Valerian, wild, its classification and uses, 166
Van Mons on the basis of the muriatic acid, 47
Variolous epidemy, account of one, 180
Veal, remarks on, as an article of food, 395
Vegetables, some phenomena in the nutrition of, elucidated, 53
Venereal disease, a treatise on, 21
——— ulcers, symptoms and treatment of, 256
Verdigris, manufacture and analysis of that of Grenoble and Montpellier, 49. Dissection of a person killed by swallowing some, 183
Vitriolic acid, its medicinal power in nervous diseases, 410

Ulcers, a View of the Treatment of, 252. Remarks on the application of dressings to, 253. Scorbutic, symptoms and management of, 253. Venereal, marks and treatment of, 256. Scrofulous, their signs and remedy, 257. Cancerous, indications and treatment of, 261.
Urethra, reflections on the use of caustic and metallic bougies in strictures of, 209, 321
Urine, case of retention of, 181

W

Water, observations on the decomposition of, 294. Remarks on the waters in common use, 295. Its medicinal properties in diseases from high living, 362. Observations on its use as a bath, 363
Webster, Mr. his History of epidemic and pestilential Diseases, 5, 117
Weidmann, Professor, his remarks on the deficiency of the gall-bladder in the human body, 102
West Indies, a Treatise on the Fevers of, 343
————, account of the seasons in, 344
White, Dr. his communication on the anti-nephritic qualities of the peach-leaf, 81
Wichmann, Dr. his method of curing distortions of the spine, 402
Women, their liability to combustion, 114
Woodville, Dr. his Observations on the cow-pox, 69
Woollett, Mr. his case of uterine hæmorrhage, 83
Wrestling, utility of that exercise, 283

Y

Yellow fever, opinions as to the origin of, 5. Is not imported into America, but is an indigenous disease, 6, 120. Considered as a true plague, 8. Mistakes concerning it, 343

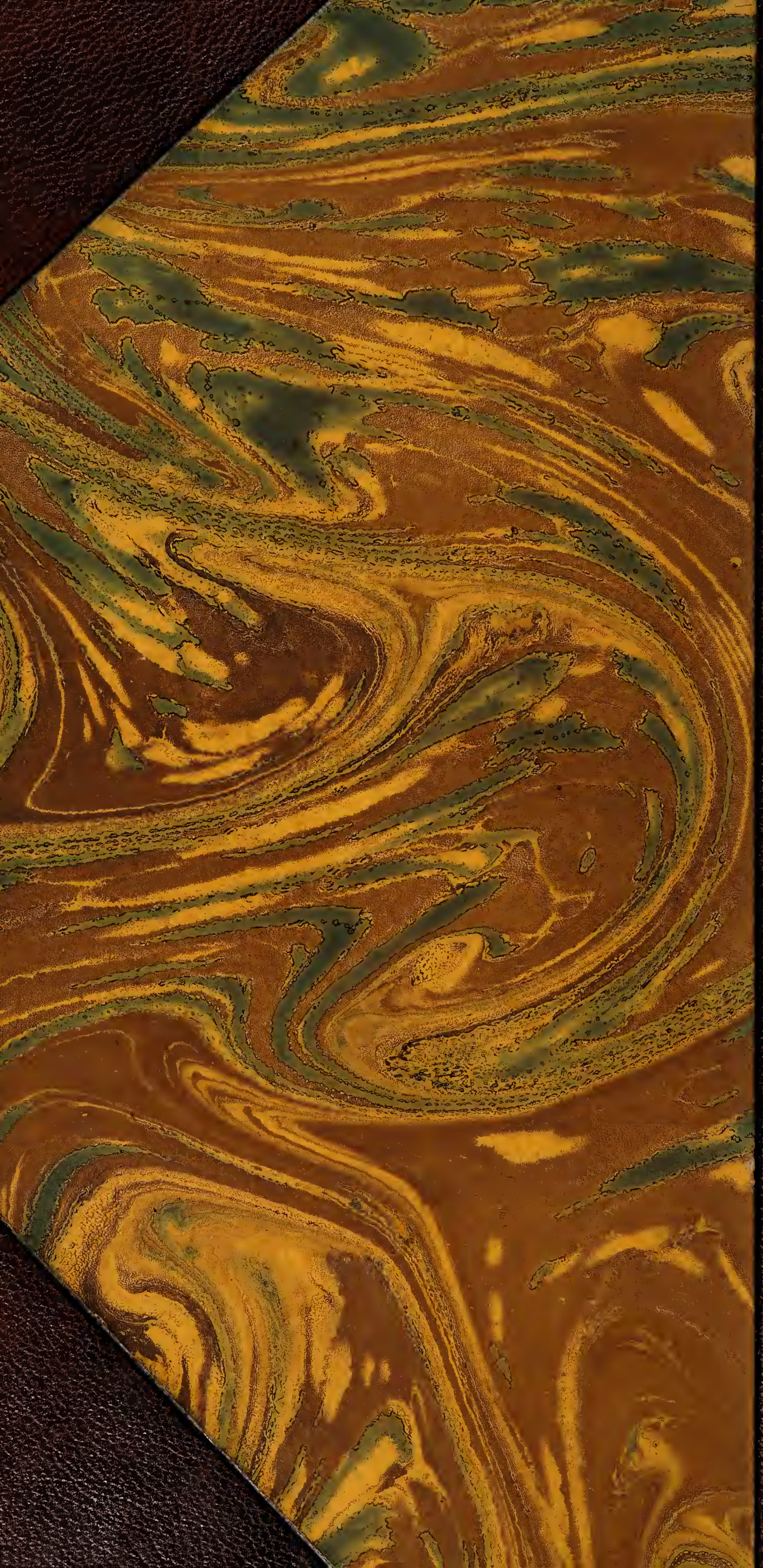
Z

Zeolites, remarks on their properties, 48

END OF THE FOURTH VOLUME.

## DIRECTIONS TO THE BINDER.

The Engraving of Dr. Thilow's INSTRUMENT for dislodging gaseous Fluids should face page 74.

The Engraving illustrative of Professor Osiander's Case of SWELLED TESTICLE should face page 301.

S. GOSNELL, Printer, Little Queen Street, Holborn.